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SOUTH DAKOTA



Journal

★ MEDICINE *and* PHARMACY ★

PUBLISHED MONTHLY BY THE SOUTH DAKOTA STATE MEDICAL ASSOCIATION
AND
THE SOUTH DAKOTA PHARMACEUTICAL ASSOCIATION

JANUARY ★ 1957

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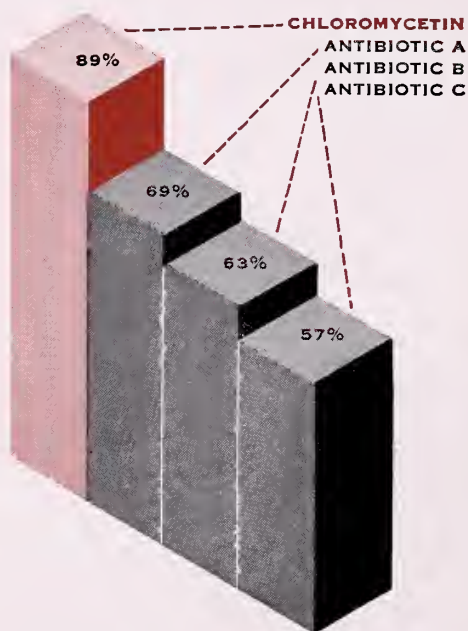
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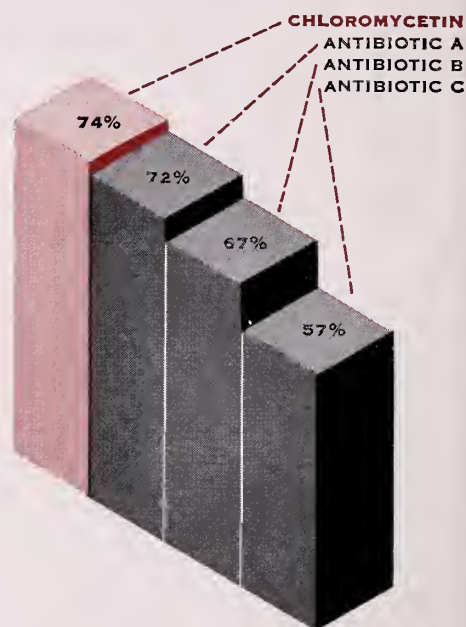
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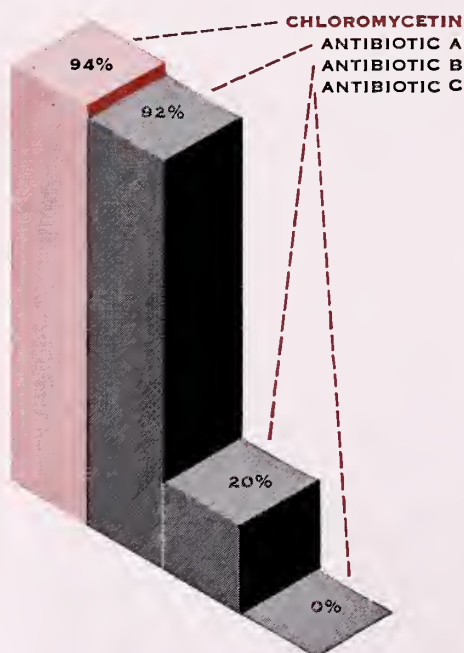




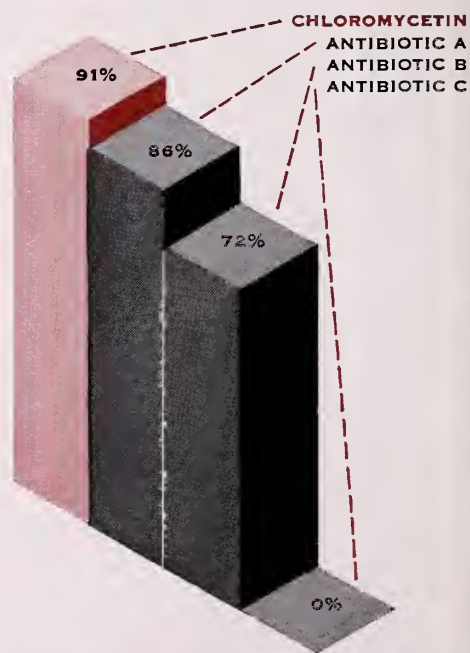
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AEROBACTER AEROGENES
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BURNED HANDS IN INFANTS

Robert E. Van Demark, M.D.

Sioux Falls, South Dakota

An infant learns to distinguish hot from cold by the process of trial and error. Fortunately, the error is usually one of minor degree; no serious injury results and the painful stimulus conditions the child against repetition of such episodes. The lack of balance and coordination predisposes infants to fall (sometimes on hot objects), and slows their withdrawal from the heat. The infant usually falls on the outstretched hand; the palmar surface is involved more frequently than the dorsal surface and forearm. In occasional instances, the burn is of a serious nature, involving the entire depth of skin and even the deeper structures; rarely a bony epiphysis may be involved to produce a growth disturbance.

Only in exceptional cases does the burn involve more than the hand and lower forearm, and in such cases the general treatment of the patient deserves the primary attention.⁹ Where more than 8 per cent of the infant body surface is involved, ("Rule of Nines" — head and neck 9 per cent, each arm 9 per cent, anterior trunk 18 per cent, posterior trunk 18 per cent, each thigh 9 per cent, each leg 9 per cent) shock can be expected and treatment for it should be instituted without delay. The acute pain requires adequate doses of narcotics. The loss of protein, sodium chloride and water from the systemic circulation is greatest in eight hours and continues vigorously for another forty-eight hours. The urinary output in these more seriously burned cases should be checked at hourly in-

tervals using an indwelling catheter. Failure to maintain an output of 30 cc. per hour will result in dehydration of the cells and renal failure. The formula worked out at Brooks General Hospital for the prevention of shock and replacement therapy has been well publicized and needs no further comment. Frequent checking on the hematocrit, hemoglobin, electrolytes and protein should guide the replacement therapy.

In the local treatment, the gentle cleansing of the burned hand with soap and water, debridement followed by a fine-mesh petrolatum dressing in the position of function, as advocated by Allen and Koch,¹ and Mason^{5, 6} has given the best results in our experience. Too often a compromise is made on the effectiveness of this primary local treatment; as a result the additional problem of infection may be added after another forty-eight hour period. Antibiotics, while helpful in some cases, are not a substitute for effective local treatment. The weeping of the burn can be controlled to some extent by uniform pressure dressings and elevation of the injured extremity. In infants and young children it is always a problem to keep their dressings on and in position. We have found that a plaster-of-paris cast, extending to the upper arm with the elbow flexed at ninety degrees, extremely effective in maintaining the dressings in place, and affording the proper rest and immobilization of these injured hands.

The initial dressing should not be disturbed for two or three weeks, except where the oc-

currence of fever or unusual discomfort demand inspection of the wound. It has been said that, "Masterful inactivity will heal more burns than meddlesome curiosity".⁸ At the end of this period, the first and second degree burns will have largely healed themselves, if not infected. The dressings are changed under strictly aseptic conditions, with gowns, masks, etc. to prevent cross infection.⁷ These patients are too young to cooperate and for the maintenance of strict sterility and freedom from pain, they should be anesthetized, ether being the anesthetic of choice. The remaining unhealed areas should be closed by skin grafting at the earliest possible time, in order that excessive scar can be avoided. The sooner the closure can be effected, the less will be the contracture.

At the Mayo Clinic, where all skin grafting procedures of the extremities are performed by the surgeons of the Orthopedic Section, a split thickness skin graft is used on the granulations after any gross infection has been brought under control. If the granulation tissue is excised, the graft is soft and pliable and may not require later replacement (Fig. 1, 2).

Despite all efforts, flexion contractures may occur in the burned hand; particularly in the smaller hands, splinting in the functional position is difficult at best. In those



Fig. 1. This two and a half year infant suffered extensive third degree burns of the thumb finger, palm and forearm, occurring typically on the volar surface.

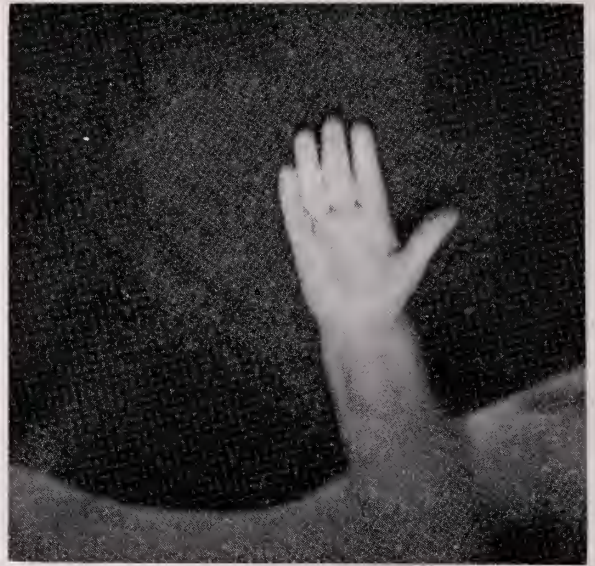


Fig. 2. Same case following excision of granulation tissue and thick split thickness skin grafting.



Fig. 3. Burn contracture in a two year old infant, involving the thumb, all fingers and particularly the ring finger.

cases where the skin and superficial subcutaneous tissues are involved (Figs. 3, 5, 6) excision of the complete scar followed by full



Fig. 4. Same case following full thickness skin grafting in multiple stages. Complete return of function.



Fig. 5. Burn contracture following fall in bonfire at 6 months. The tip of the little finger was lost and the entire little finger contracted into the palmar scar.



Fig. 6. Same case as Figure 5, showing the severe contracture of the middle finger, as well as the thumb, other fingers and palm.

thickness skin graft is the procedure of choice. Deeper burns require pedicle skin grafting. Tendon grafts¹⁰ are usually more successful in the older child who can fully cooperate in the post-operative mobilization program. In children, stiffness of the joints

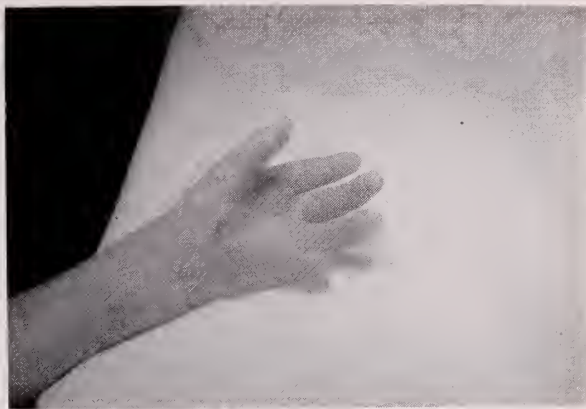


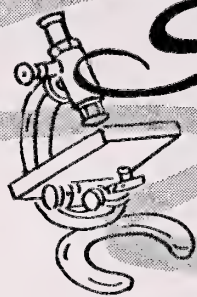
Fig. 7. Post-operative result of same case shown in Figures 5, 6, following multiple full thickness skin grafts. Excellent function.

following immobilization is not the cause for concern as in adults. Splinting, continued at night over a long period of time, will tend to prevent the recurrence of contractures in those patients with a tendency toward excessive scar formation (high keloid index).

Bony growth deformities may occur as a result of injury to the epiphysis, or to the unilateral inhibiting effect of scar contractions on the epiphyseal line, similar to that of an epiphyseal stapling operation. Such patients require, in addition to skin replacement, osteotomy of the affected bone at an appropriate age. Continued observation of these patients by the surgeon over a period of years, and the correction of any complications incident to growth and use, will insure a good end result.

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Scientific PAPER

VIRUSES AS INFECTING AGENTS

Eugene C. Pirtle, Ph.D.

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Abstract*

The present use of the term "virus" has evolved over a period of centuries. Its initial use applied to poisons in any form. It was later used to include any and all types of infectious agents which produced disease. At the present time its use is restricted to designate those infectious agents which are very small, usually being out of range of the ordinary light microscope.

Viruses considered as a group comprise a very heterogeneous class of infectious agents, which are smaller than ordinary bacteria and which require living and susceptible cells for survival and reproduction.

Although active immunization against a viral disease, smallpox, was being carried out in the eighteenth century, progress in virology remained relatively slow for many decades.

It was not until 1930 and after that progress in virology moved ahead rapidly, but virology is now considered to be one of the liveliest and most productive divisions of microbiology. This progress may be attributed to several technological achievements, four of which would appear to be outstanding. These are: the use of embryonated eggs as a source of susceptible living cells for propagating many viruses; the electron microscope for the visualization of individual viral particles; the ultracentrifuge for separation of viruses from their host cells following multiplication; and the introduction of tissue culture for propagation of viruses and the production of vaccines.

There are a number of reasons why viruses are unique as infecting agents. The first of these is their extremely small size, usually requiring an electron microscope for their visualization. They show no independent metabolic activity and are biologically incomplete in the absence of suitable host cells. Thus they are strict intracellular parasites, entirely dependent upon host cells for multiplication. The host cell therefore completes the virus, indicating their truly borrowed existence. Viruses exhibit degrees of variation in host range. The rabies virus for instance can attack a wide range of mammalian hosts, whereas the virus of serum hepatitis is known only to infect man.

They likewise exhibit variation in tissue affinities. The influenza virus shows a preference for respiratory epithelium; and so far as is known, the trachoma virus invades only the conjunctiva and cornea of the eye; the virus of smallpox, during an infection, will invade not only the respiratory tract, but also the abdominal viscera and the skin.

Adaption and mutation are two other characteristics which further characterize viruses. Adaption may be observed in nature as is presently occurring in the case of psittacosis virus in this country; it is certainly encountered with each isolation of a virus from a clinical specimen in an experimental animal, the embryonated egg, or in tissue culture. From a practical point of view adaption of viruses to new hosts has proved advantageous in the production of such vaccines as those used in yellow fever and the various other modified viruses presently being used. Mutation of viruses can be seen to occur

* Presented at a meeting of the South Dakota Society of Internal Medicine in Vermillion, South Dakota, on September 29, 1956.

spontaneously, as in the case of the constantly changing influenza viruses, or as the result of being forced to do so when they encounter an immune environment.

Perhaps the most outstanding characteristic of viruses is the manner in which they reproduce. It is currently believed that viral reproduction involves contact with the host cell followed by entrance into the host cell of at least the "genetic portion." It has been demonstrated for several of the viruses affecting men that after gaining entrance to the host cell it is extremely difficult or impossible to demonstrate the infectious phase of the virus. It is believed that the virus actually breaks down into smaller subunits and that somehow the host cell is first diverted and then converted into a virus-producing unit. After a variable lag period, new virus makes its appearance. This unique fashion in

which viruses undergo multiplication within their host cells perhaps explains why the advancement in the therapy of viral diseases has been relatively slow.

Immunization against viral disease on the other hand has steadily progressed. Three main approaches to producing active immunity against viruses have been used. Firstly, one antigenically related virus may be used to immunize against another, as the vaccinia virus is used to immunize against smallpox. Secondly, an attenuated or modified living virus may be used to immunize against a disease-producing virus of the same type, as that presently being used in the case of yellow fever. Lastly, inactive homologous virus may be used to produce immunity against an active virus of the same type such as that currently being used in the immunization against poliomyelitis.

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SPLENIC RUPTURE CASE REPORT

J. C. Rodine, M.D., Aberdeen, S. D.

The following case is interesting from the standpoint of history, diagnosis and findings at operation. The patient having been referred, enters with a very scanty history in that she felt this illness had been coming on for about two weeks. She had been complaining of generalized abdominal pain, nausea and vomiting, and stated she had some "gall bladder trouble." The day before admission the patient was suddenly awakened by a severe pain in the upper left abdominal quadrant, which was soon followed by pain in the left shoulder, neck and arm, and some nausea and vomiting. The patient was hospitalized and received several hypos for relief of pain. At the same time she was given Metrazol for a drop in blood pressure. Clinical findings were apparently those of cardiac failure. She steadily presented a "down hill" course and was transferred to our hospital at which time she presented the following findings.

White female, Mrs. R. J. age 29 years who is acutely ill. Blood pressure 100/68, pulse 132, respirations 32. The patient is very quiet and complains of a steady generalized abdominal pain. Examination of the head was negative except for very pale conjunctiva and mucus membranes. The neck was negative. The chest did not show evidence of cardiac enlargement, but the rate was 132 with a double murmur at the apex. The lung fields were clear. The abdomen was rigid with extreme tenderness over both kidney areas. No masses were palpable in either the liver or splenic areas. Auscultation revealed a "silent abdomen" with grade three rebound tenderness and grade two rigidity. Bimanual examination presented extreme tenderness in

the right adnexal quadrant and evidence of shifting dullness of the abdominal cavity. The extremities were negative except for being very pale. Reflexes were sluggish.

The blood count on admission was hemoglobin 62%, RBC 3.4M., leucocytes 14,911; Differential, segmented 73%, bands 7%, Basophils 1%, Lymphocytes 17%, Monocytes 2%. The Urine was 6.0 Ph, negative for sugar and albumin, 1 plus WBC and occasional RBC. The temp. on admission was 99.7 degrees.

Subsequent observation a few hours after admission to the hospital: The patient was transfused immediately and given supportive treatment. After 500 cc. of blood had been given the blood pressure began to stabilize altho the pain remained the same. The patient was x-rayed. No gas was noted under the diaphragm, but a loop of small bowel which was distended was noted in the upper abdomen. The chest was negative. The blood pressure was 122/80 after blood and fluids were given, but there was more evidence of a shifting dullness in the abdomen and the patient was explored immediately. The pre-operative diagnosis was, "Intra-abdominal Hemorrhage."

Under general anesthesia an upper left transverse abdominal incision was made and the abdomen opened. Upon opening the abdominal cavity a large quantity of blood was encountered. The entire abdomen was inspected, everything was normal except in the area of the upper left quadrant. This area contained many large clots and the spleen was found to contain a large hematoma, sub-capsular type. The hematoma was nearly twice

(Continued on Page 21)



ARE YOU TAX BAIT?

(Continued from December)

Ralph R. Benson, Attorney-at-Law
Los Angeles, Calif.

BAIT #15

Will the Inventory of an Estate show up possible unpaid income taxes?

This year Dr. O died suddenly of a coronary. He was 36 years old, a Professor of Pathology, and relied on his \$7,000 per annum for his wife and family. All his life he never experienced any income tax headaches. But on his death his income tax problems suddenly came to life.

It all started 3 years before when he was honored with a \$25,000 prize in recognition of scientific achievement and given another \$9,000 for 3 additional years' future work in this field, receiving it at the rate of \$3,000 per year for 3 years. He actually paid no income tax on any of this money. When he died the Inventory of his Estate showed a cash sum of \$25,000 and nothing else. The Government is likely to call the widow in and put a restraint on the funds. The Government is interested in knowing how a Professor was able to accumulate \$25,000 cash. Actually, there is no income tax payable on the \$25,000 itself since it is a "reward" in recognition of the Doctor's past efforts. But the \$9,000 which was an "award" for future efforts, although already used up for living expenses, should have been reported on the Doctor's income tax returns for the past 3 years. So, after the widow retains a lawyer or an accountant and files 3 separate amended income tax returns reporting \$3,000 more per year and pays the three additional income taxes due and interest charges, and after months of delay, the matter will finally come to an end.

The moral is: Nothing is so sure as death and taxes — and even income taxes after death. Uncle Sam regularly checks inventories of estates for income taxes which may have been overlooked by the deceased.

See your tax advisor in the year the money is received to determine if it is taxable or exempt. Do not let the problem linger on.

BAIT #16

Are you a victim of the bank deposit method?

Dr. P last year had a crazy bank account that took flip-flops. His trouble was, he put everything in one commercial account — business receipts and everything else. Even \$5,000 was thrown into the account when the Doctor hit the jackpot on a super-doooper National quiz show. He sold the two truckloads of prizes, worth \$20,000 to the first taker for \$5,000 cash. The bank account and the Doctor's luck were riding high — that is until the photo of the beaming Doctor in the newspaper was seen by the local tax office. This year his return is checked thoroughly and the money from the prizes traced to his bank account. The Doctor had a "new" jackpot in a colossal amount of time spent by him and the tax people in going over his return and bank account. The Doctor was quickly informed that the full fair market value of the merchandise to him — \$20,000.00 — was taxable. It was a "shocker" to learn that the Government ignored the \$5,000 he received from the extremely willing buyer and was required to pay tax on \$20,000 most of which money he never received. He had another jolt when the tax man looked with

an inquiring eye at all his bank deposits for the year showing a grand total of \$45,000 when the Doctor had only shown \$30,000 gross total on his return earned from his practice. From a simple bait of publicity, the tax men were attracted to the bigger bait lurking in his bank statements. From the initial bait, a secondary bait was revealed. From a routine field audit, where the agent assumes the honesty of the taxpayer, now the past returns will be turned over to the special agents of the Intelligence Unit as a possible fraud case if not sufficiently explained. Even accounting for the \$5,000 from the "lucky wind-fall," it left the Doctor with the problem of explaining the rest—\$10,000 of deposits—for the year. Forcing the taxpayer to explain is called the "bank deposit" method. This torment is actually a part of each investigation since bank deposits are business records. This method is rationalized by the Government as being a valid, reconstructed income. Dr. P is tormented for the next few months in kicking out the phony reconstruction and explaining this \$10,000 of deposits. This is what he comes up with:

- (1) \$3,000 of checks cashed by Dr. P as a favor for his patients. He felt he was far more justified in cashing them than the local saloon with, of course, the patient using the cash from the pay check to pay at least \$5 on his bill.
- (2) \$3,000 transferred from an old checking account in another city — money on which tax had been reported and paid 5 years ago when the Doctor had been living there.
- (3) \$1,000 of his wife's "rainy-day" savings deposited when the Doctor's bank balance dropped too low to cover checks that were already out.
- (4) A \$3,000 loan obtained from his bank and deposited to his account to pay for new x-ray equipment.

The moral is: Dr. P now looks at prizes and quiz programs on radio or TV with a jaundiced tax-eye before ever accepting them again. Dr. P deposits only his net receipts from patients in one commercial account and when he does cash their paychecks at the office, he immediately hustles to the Bank and trades the same checks in for cash. When his account is low, he pays his bills by money order. When he borrows money to buy equip-

ment, he has the bank make out the check directly to the surgical supply house, completely bypassing his checking account. When he wants to close out an old checking account, he simply writes checks against it to wipe it out without bothering the old bank to transfer the funds.

BAIT #17

Are you a victim of the net worth theory?

Three doctors attended the "birth of a group." There was Dr. Q, an internist, who had the land and building worth \$150,000 all paid for. Dr. R was a GP with a large practice as the core of the new group practice. Dr. S, an Orthopod of international prestige, would be the "old" man of the group, although only 45, and he was willing to leave his post at the County Hospital and contribute his services as specialist and executive administrator. Neither Doctors R nor S were in a position to contribute any cash or property.

At the end of the first year, the group filed a partnership return, innocently called an "information return," but jammed full of financial information about the group by way of a balance sheet and profit and loss statement. It showed in the net worth, land and buildings worth \$150,000, owned by 3 equal partners. The group made a total net the first year of \$120,000 split \$40,000 apiece. In view of the income and assets on the partnership return, the Government checked out each partner's individual return, each for the first time. The GP and Orthopod, who contributed neither property nor cash, cleared easily. However, Dr. Q, the contributor of the land and buildings, received the "net worth" test. It seems that he did not have his records for the past 4 years. By a fluke, an aide had thrown out some of his old cash receipts books and records when the Doctor told her it was O.K. to destroy a pile of new day books received in January from practically every surgical supply house and bank.

From the initial bait of high partnership income, the Government went hook, line and sinker for the secondary bait of inadequate bookkeeping to follow the trail of wealth. From a field check, it becomes a fraud check.

Because of the spotty records, the Government applied the net worth accounting method to reconstruct his income over the

(Continued on Page 15)

THE HISTORY OF THE SOUTH DAKOTA STATE MEDICAL ASSOCIATION, 1882-1956

Clark Jaye Pahlas
Pierre, South Dakota

PREFACE

In writing the history of the South Dakota State Medical Association the author has attempted to satisfy his own desire to understand more fully the professional development of the medical practice in South Dakota. Coincident with this desire has been the hope of contributing in some way to the neglected history of the seventy-five years of organized medicine in the state.

Grateful acknowledgment is made to Doctor Cedric C. Cummins, and Doctor Glen R. Driscoll of the Department of History of the University of South Dakota for blending into this thesis their professional knowledge, their endless patience and their warm personalities.

The writer is indebted to Dr. R. G. Mayer of Aberdeen for his co-operation and assistance in making available the records of the Association; and to Mr. John C. Foster, the executive secretary of the South Dakota State Medical Association, who first proposed the undertaking. Thanks is also extended to Doctor Gregg M. Evans, secretary of the South Dakota State Board of Examiners in the Basic Sciences, for information dealing with the Basic Science Law.

Appreciative recognition is extended to Mrs. Robert Walz of Vermillion for proof reading this thesis, and to the typist Mrs. Gail Prins.

CHAPTER I

THE EARLY PERIOD OF GROWTH AND CONSOLIDATION

On the second of March, 1861, the fifteenth President of the United States, James Buchanan, signed a bill bringing into corporate existence the Territory of Dakota. In May of that year Mr. Buchanan's successor, Abraham Lincoln, appointed Dr. William Jayne, a practicing physician of Springfield, Illinois, the first territorial governor.

The Dakotas, comprising a vast area of some three hundred and fifty thousand square miles, became the largest territorial organization in the United States. Its total population, discounting Indians and mixed bloods, was in the neighborhood of twenty-four hundred individuals, or a fraction of one white settler for every one hundred square miles of its immense domain.

Into this newly created realm, following the stream of westward migration, came the farmer, miner, buffalo hunter, and adventurer, seeking their fortunes in the land of the Sioux. With them came the physician, carrying his satchel of remedies and instru-

ments of healing at his side, his courage and dedication in his heart. There on Dakota's plains the "horse and buggy doctor" met the challenge of disease and death.

In the scattered communities where two or three like-minded physicians happened to locate, they would meet to discuss their common problems. These men, dreaming together of what yet might be, formed the early beginnings of the Dakota Medical Society. As the communities began to grow in size and number, the physicians became more numerous and united into societies for their common benefit. Little is known of these early groups except that they did exist and were functioning at Deadwood, Aberdeen, Bismarck, Fargo, Northwood, and other centers at a very early date.

It might well have been through the suggestion of these early societies that the territorial legislature passed in 1869 the first law to protect the citizens of Dakota against malpractice and to elevate the standing of the medical profession. This territorial law of 1869, the first legislative act to provide restrictions on those who practiced medicine in the territory, appears in Appendix A of this thesis.

The medical profession in Dakota Territory formed its first official governing body in 1882. The name given this infant society was the Dakota Medical Society.* The purpose of the association was to be twofold, professional advancement and public service.¹

FIRST ANNUAL MEETING

On June 3, 1882, the first annual meeting was held at Milbank in the parlor of the

1. See Article II, Section 1 of the Constitution of 1882 in Appendix B of this thesis.

* The name Dakota Medical Association is given in the Constitution of 1882; the organization, however, seemingly disregards this and uses the title Dakota Medical Society up to 1906. For clearness in this work the term **society** will indicate the Dakota Medical Society up to 1906, after which the term **association** will be submitted.

Grand Central Hotel. Here the early Dakota physicians met to form a medical society in and for the Dakota Territory. Dr. A. Grant of Bath was elected temporary chairman, and Dr. W. E. Duncan of Ellendale became temporary secretary. A committee made up of Doctors O. S. Pine of Milbank, S. B. McGlumphy of Yankton, and H. G. Rose of Milbank was appointed to draft the Constitution and By-laws.² It was agreed that the association would be auxiliary to the American Medical Association and that it would “. . . exercise its functions by virtue of the voluntary faith of its members.”³

Membership in the new society was to consist of permanent members, members by invitation, and corresponding members. Each physician was assessed an annual fee of \$2.00 to cover the expense of printing the society's yearly transactions. All members were to be “. . . physicians and surgeons authorized to practice medicine and surgery by a medical college qualified to grant a diploma and acknowledged by the American Medical Association.”⁴ These qualifications were possessed by the ten men who became the founders of the Dakota Medical Society by subscribing to the Constitution. Their names, locations, and offices were as follows:⁵

- S. B. McGlumphy—Yankton—President
- O. S. Pine—Milbank—First Vice President and Treasurer
- A. Grant—Bath—Second Vice President and Censor
- H. G. Rose—Milbank—Secretary
- L. F. Diefendorf—Aberdeen—Assistant Secretary
- D. F. Etter—Yankton—Censor
- W. E. Duncan—Ellendale—Censor
- J. B. Van Velson—Yankton
- J. G. Conley—Elk Point
- J. C. Morgan—Sioux Falls

Doctors McGlumphy and Pine were selected as delegates to the convention of the paternal organization, the American Medical Association, at St. Paul in June, 1882.

2. **Dakota Medical Society Records, 1882-1904**, Unpublished manuscript on file in the office of Dr. R. G. Mayer of Aberdeen, South Dakota. Taken from the minutes of the first annual meeting, 1882.
3. Taken from Article I, Section I of the Constitution of 1882.
4. Article III, Section 1, Constitution of 1882.
5. **Dakota Medical Society Records, 1882-1904**, pp. 13, 14.

Other physicians in the territory were desirous of becoming affiliated with the Dakota Medical Society, but because “the railroad in the Jim River Valley was not yet connected between Aberdeen and Yankton,” many were unable to attend.⁶ Among those who wished their names to be associated with the society, however, were Dr. Camp of Springfield, Dr. Tatman of Mitchell, Dr. Miller of Yankton, Dr. Osborne of Frederick, Dr. Brecht of Yankton, Dr. Nutting of Marion Junction, and Dr. Kennedy of Ordway.⁷

The original Constitution of 1882 provided for the formation of three standing committees: Arrangements, to care for the needs of the annual meetings; Publications, to see to the publication of the yearly transactions; and Medical Ethics, to maintain medical ethics among association members. When the special session was held at Canton in early August, 1882, there appeared as many as thirteen subcommittees dealing with the practice of medicine. Of special interest were the eight committees on (1) Epidemic and Contagious Diseases, (2) State Medicine and Hygiene, (3) Practice of Medicine, (4) Surgery, (5) Obstetrics and Diseases of Women, (6) Therapeutics, (7) Diseases of Children, and (8) The Fevers of the Missouri Valley. The association could form as many subcommittees connected with medicine and surgery as it judged necessary. The committees so formed could be directed to give detailed reports at the next annual meeting.

The medical doctors in the territory were particularly concerned with the control of tuberculosis and typhoid fever. Special care was given to improving sanitary conditions, with emphasis on drinking water facilities. These were the days of the general practitioners. All the ills of the people were treated by these local physicians. Although their knowledge was limited, as compared to that of the later specialists, their hands of healing were welcome in the homes of the Dakotas, and their practices circumscribed the broad areas of disease and illness known to the Great Plains.

6. “Editor's Column,” **Grant County Review**, June 8, 1882.
7. **Loc. cit.** Membership in the society increased to one hundred and four by 1891; by 1908, membership had reached two hundred and seventy-six, or about 45% of the physicians residing in the state. For a graph depicting membership from 1882 to 1956 see Appendix H of this thesis.

EARLY GROWTH

The South Dakota State Medical Society was weak during these early years of growth in comparison to its later authority. By May 16, 1883, the society had on hand the grand total of \$9.17; by 1886, \$45.00; and by 1896, \$31.24.⁸ These early financial statements became inappreciable when compared with the association's cash balances amounting to \$2,287.73, \$3,823.18, and \$2,353.01, as recorded for the years 1923, 1931, and 1941, respectively.⁹ Financial weakness, however, was not the only problem faced by the society. At the third annual meeting held in Mitchell on May 21, 1884, only five members were present. Not constituting a quorum, they adjourned after setting a date for the 1885 meeting.¹⁰

Within the year, however, steps were taken to strengthen and consolidate the society, one of the most significant being achieved at the fourth annual meeting at Aberdeen on May 27, 1885, when the association initiated a movement for incorporation. Still, it was not until the annual session held at Chamberlain in 1891 that incorporation was attained. The new vitality was further evidenced at the succeeding annual meeting in Yankton, May 20 and 21. Some twenty-five members were present, receiving "courteous entertainment" from the city of Yankton. This meeting took on some of the attributes of later and larger conventions. Tours were made through the Dakota Hospital for the Insane, the government school for Indians, the public school, and Yankton College. A number of scientific papers were read. "Epidemic Fevers of Dakota" by Dr. F. Andros of Mitchell was of special interest to the members, as was a report on an attempted suicide. The latter paper told how the patient, suffering from a cut throat and a stab wound in the heart, reportedly lived for "... eleven or twelve days after receiving the wound, and had received his nourishment through a stomach tube."¹¹

8. *Dakota Medical Society Records*, 1882-1904, pp. 23, 38, 128.

9. *Journal Lancet*, XL111 (August 1, 1923, 373; LI (August 15, 1931), 501; LXI (July, 1941), 256.

10. This is the only annual meeting that was forced to dissolve because of lack of a quorum.

11. *Dakota Medical Society Records*, 1882-1904, p. 36.

The oddity of tube feeding was not the only discussion of importance at this Yankton meeting of 1886. It was here that the **Dakota Medical Brief** was established as the Dakota Medical Society's official publication. Doctors Sevey and Andros of Mitchell were delegated to see to its establishment and publication for the coming year.¹²

The Yankton meeting adjourned with the society raising its head as a new and growing institution. The association began to be noticed and accepted, as witnessed by the reduced rates received by its members traveling to and from the convention by rail. Furthermore, the society was gaining a personality of its own, being given authorization to procure a suitable seal and to print certificates of membership.¹³ It was to be represented by seven delegates to the coming convention of the American Medical Association and by six delegates to the ninth International Medical Congress at Washington. Thirteen members to represent the "wild Dakotas" gave proof of the association's existence and potential. Further evidence of its growth was furnished by the addition of twenty-seven new members in June, 1887.

STANDARDS OF PRACTICE

During these early days there was widespread concern among association members for state legislation regulating the standards of their profession. In August, 1882, the society adopted a resolution which exemplified its intentions to promote professionalism. Its Committee of State Medicine and Hygiene was instructed "... to draft a bill regulating the practice of medicine and surgery, and the qualifications of physicians."¹⁴

Partly as a result of this activity, the territorial legislature in 1885 added Chapter 63 to the original medical law of 1869. This new act gave teeth to the previous statute by creating territorial and county boards of health and by providing for protection of the health of persons and animals.

This measure was gratefully received by the society, which urged all physicians to influence "... each member of the next legislature to be elected from their districts or counties, to favor sustaining the present law regu-

12. *Ibid.*, pp. 34, 35.

13. This seal stood as the official seal until reorganization in 1904.

14. *Dakota Medical Society Records*, 1882-1904, p. 17.

lating the practice of medicine, and to support any amendments thereto suggested by the Committee on Legislation.”¹⁵

Much of this interest in professional standards stemmed from the prevalence of pseudo-doctors practicing without proper training or certification. The first of such “quack cases” was brought to the attention of the association during the sixth annual session at Huron in 1887. This particular case dealt with a “. . . young physician, advertizing special qualifications in midwifery. It was disclosed that the method of delivery employed by this man of ‘special qualifications’ was as unique as it was unsuccessful.”¹⁶ So brutal were the methods in the case described (both the child and mother died) that the man was held for manslaughter. “The wise Justice” who held preliminary examinations admitted that he was “. . . moved at times through sympathy almost to vengeance, but could find no reason why this man of special qualification should be held.”¹⁷

The sordid details of the report led to lengthy discussions by members of the Dakota Medical Society on the “prevalence of quackery in localities.” They agreed that legislative assistance was needed in driving out these unprofessional elements attempting to infiltrate the profession.¹⁸

Constantly on the alert for signs of quackery, the association in 1897 spoke out against a bill before the state legislature to legalize osteopathy. When Governor A. E. Lee refused to sign the bill, the Dakota Medical Society congratulated him for his “sterling courage and good sense” in opposing a measure that would have been “detrimental to the public health and interests.”¹⁹

This desire for professional unity and ethical standards advocated by the society was expressed by its new president-elect in 1887. Dr. Frank Etter in his acceptance address at the sixth annual meeting held in Huron stated what he felt to be the professional traits and duties of the physician. The following is taken from Dr. Etter’s address:

15. *Ibid.*, p. 39.

16. *Ibid.*, pp. 47, 48.

17. **Dakota Medical Society Records**, 1882-1904, pp. 47, 48. From report given by Dr. M. J. Evans of Groton at the sixth annual session, 1887.

18. *Loc. cit.*

19. *Ibid.*, p. 144.

It [the Medical Society] is composed of no mean or insignificant body of men and women, but of the highest type of body politic, that our communities afford, in culture, in intelligence and in the divine art of healing. Here sitting before me, are the true representatives of the grandest profession on earth, who, in pursuance of duty are willing at all times and under all circumstances to do and dare, and if need be to die for the good of humanity — a loyal band of unselfish, brave benefactors who toil without the hope of fee or reward.²⁰

Professionalism thus became a predominant issue, and those physicians failing to abide by the society’s code of ethics became known as “irregulars.”

STATEHOOD AND REORGANIZATION

The attainment of statehood by South Dakota in 1889 necessitated a change in organizational name and boundaries. Accordingly, early the next year the Dakota Medical Society’s constitution was amended by changing the official title to the South Dakota State Medical Society. Immediate action was begun to incorporate under state law, and on May 20, 1891, Dr. W. E. Crane, Dr. J. Tatman, Dr. R. C. Warne, and Dr. H. Warne of Mitchell; Dr. W. Ware of Salem; and Dr. F. B. Bullard of Gettysburg drew up the necessary papers at Mitchell prior to the annual meeting. Thus the tenth annual convention at Chamberlain on June 10, 1891, was able to give final approval to the new incorporation.²¹

To advance professional unity and cooperation further, the group underwent reorganization again in 1903. In that year the bylaws of the society were amended to admit additional members from the districts of Watertown, Brookings, Huron, Pierre, Sioux Falls, Yankton, and the Black Hills. The reorganization of local societies was approved as follows:

District No. 1. Composed of the counties of Roberts, Marshall, Day, Brown, Spink, Edmunds, Faulk, McPherson, Campbell, Walworth, Potter, Boreman, Dewey, Scharassi, and north half of Grant.

20. **Dakota Medical Society Records**, 1882-1904, p. 49.

21. For the **Articles of Incorporation of the South Dakota State Medical Society**, see Appendix C.

- District No. 2.** Composed of the counties of Codington, Clark, south half of Grant, part of Deuel, and north half of Hamlin.
- District No. 3.** Composed of the counties of Brookings, south half of Hamlin, part of Deuel, and part of Kingsbury.
- District No. 4.** Composed of the counties of Stanley, Armstrong, Hughes, Hyde, Hand, Beadle, and parts of Kingsbury, Hamlin, and Sanborn.
- District No. 5.** Composed of the county of Lake and parts of Moody, Miner, Kingsbury, Hamlin, and Sanborn.
- District No. 6.** Composed of the counties of Hanson, west half of McCook, Davidson, Aurora, Brule, Lyman, Pratt, part of Hutchinson, part of Turner, Sanborn, and Jerauld.
- District No. 7.** Composed of the counties of Minnehaha, east half of McCook, Lincoln, and parts of Moody and Turner.
- District No. 8.** Composed of the counties of Union, Clay, Yankton, Bon Homme, part of Turner, Douglas, Charles Mix, part of Hutchinson, Gregory, Tripp, and Meyer.
- District No. 9.** Composed of the counties of Butte, Lawrence, Meade, Pennington, Custer, Fall River, Shannon, Washington, Washabaugh, Jackson, and Lugenebeel.²²

Thus through reorganization the society had divided itself geographically into nine districts as component parts of the state association. Each selected delegates to the House of Delegates during annual or special sessions of the state association; these delegates had the power to act as the legislative body of the society. Because each district had society representation on the state organizational

level, democratic procedures were encouraged, and the House of Delegates became the spokesman of the local societies. In addition to these district delegates there were councilors chosen from each of the nine district societies. These nine councilors were to meet in private session during the annual meetings of the state society in the capacity of "official organizers of the association and the peacemakers as well."²³

After the changes of 1903 it became apparent that instead of having one society working for the benefit of the profession there were now nine such organizations. Seeing the advantages of "home rule", some of the societies began to take the initiative in establishing medical policy in regard to such matters as professionalism, medical jurisprudence, and fee bills. This autonomous behavior was encouraged by the South Dakota State Medical Association in hopes that by satisfying the peculiar needs of the district societies its own efficiency would be improved. It was further believed that in this way the district organizations would best reflect the desires and needs of the individual practitioners.²⁴

Reorganization was not without its handicaps, however. Problems of liaison, of delinquent dues, and of uninformed leadership in the district societies created new difficulties.²⁵

In 1906 the South Dakota State Medical Association took steps which helped to strengthen its position. In that year it was proposed that the **Northwestern Lancet** be the official publication of the medical associations of North and South Dakota and Minnesota. Dr. W. A. Jones of Minneapolis, publisher of the **Lancet**, hoped that his periodical might be accepted by the two Dakotas (the **Lancet** was the official journal for the Minnesota association) and thus make "his paper

22. **Dakota Medical Society Records**, 1882-1904, pp. 182, 83. The listing of districts are stated just as they appear on the minutes of the meeting of 1903. For the present (1956) medical districts see map in Appendix F.

23. **South Dakota State Medical Association**, 1904-1914, Unpublished manuscript on file in the office of Dr. R. G. Mayer of Aberdeen, South Dakota. Taken from the proceedings of the Board of Councilors held May 23, 1906.

24. *Ibid.*, taken from the proceedings of the House of Delegates held May 23, 1906. It should be noted that the Articles of Incorporation were amended in 1906, changing the name of the South Dakota State Medical Society to the South Dakota State Medical Association.

25. District No. 5 was without representation in the House of Delegates until 1906.

the strongest in the Northwest.”²⁶ The South Dakota society agreed to terms, and the following year (1907) a contract was entered into between the South Dakota State Medical Association and the **Northwestern Lancet** providing for the publication of the association’s proceedings and transactions, along with the association’s right to print articles of concern to them and the medical profession. This contract, renewed the following year, stipulated that “. . . the South Dakota State Medical Association be given proper recognition upon the title page of the periodical.”²⁷

Establishing the **Lancet** as the official journal marked another milestone in the path of progress for the association since its conception in 1882. This progress, however, was hindered by the disturbing fact that the association represented only 45 per cent of the practicing physicians and surgeons of South Dakota.²⁸ This was even more significant when coupled with the fact that the number of doctors in the state had increased nearly 75 per cent between 1905 and 1908.²⁹ It was quite apparent that of this increase in medical doctors few became members of the association or took interest in local societies.³⁰ In

fact, between reorganization in 1903 and the annual meeting in 1908 many of the district societies actually showed a loss of membership. It was for this reason that reorganization of the local districts was again proposed in 1907.

It was not until 1910, however, that the first attempt was made to add districts to the nine established in 1903. The Tenth District (Hot Springs District) was created in that year, comprising the counties of “. . . Pennington, Custer, Fall River, Washington, Shannon, Washabaugh, Bennett, and that portion of Stanley County west of Lyman on the Chicago, Milwaukee, and St. Paul Railroad.”³¹

The ill-conceived Hot Springs District lasted only one year, because of the uncovering of information showing that it was formed through the influence and pressure of certain people within the area desiring “personal aggrandizement.” The disclosure of a fraudulent petition revealed that it had not been the universal desire of the doctors in the Hot Springs area to form their own society. For this reason the Hot Springs District had its charter revoked in 1911 at the state association’s annual meeting, and the territory contained in the Tenth District was restored to the Ninth or Black Hills District.³² Although the association members felt that breaking up the larger districts into smaller ones would help to foster a community attitude and an *esprit de corps*, they opposed the method by which the Hot Springs District had been formed.

Perhaps the greatest hindrance to the success of local organization was a scattered and small population. This problem was extremely severe in the western areas of the state, where it was coupled with that of isolation from other district societies. It was often a matter of personal sacrifice and inconvenience for state association members from the western areas to meet on the state level or even to gather together on the local level. For this reason a new Tenth District (or Rosebud District) was formed in 1912 in order to reduce

26. **South Dakota State Medical Association, 1904-1914.** Taken from the Proceedings of the House of Delegates, 1906. The **Northwestern Lancet** was a semimonthly medical publication first printed in Minnesota on October 1, 1881. The **Lancet** had been preceded in that state (1870-1874) by the **Northwestern Medical and Surgical Journal** founded by Dr. Alex J. Stone. In 1886 the **Northwestern Lancet** was purchased by Dr. Stone, and it is because of Dr. Stone’s editorship of these two early medical publications that the **Lancet** claims its origin to be 1870 rather than 1886. In 1912, the name of the publication was changed to its present title, the **Journal Lancet**.

27. **South Dakota State Medical Association, 1904-1914.** Taken from the Proceedings of the House of Delegates’ 1907 annual session. The records bear out the conclusion that the **Journal Lancet** served the South Dakota State Medical Association satisfactorily from 1907 to 1948. The **Lancet** covered a wide field of medical interests, representing the medical associations of South Dakota, North Dakota, Minnesota, and Montana.

28. **Ibid.**, taken from the Proceedings of the Board of Councilors, 1906 annual session.

29. **Ibid.**, taken from the Proceedings of the House of Delegates, 1909 annual session.

30. The main excuse given by non-members for not joining the association was the distance from and poor railroad connections with their district societies.

31. **South Dakota State Medical Association, 1904-1914,** Proceedings of the Board of Councilors, 1910.

32. **Ibid.**, Proceedings of the House of Delegates, 1911 annual session.

the size of the districts of this part of the state.³³

Reorganization, however, was not the only plan proposed to alleviate the problem of membership. Along with the idea of reorganization in 1907 came the plan of hiring an association member to travel throughout the state for the express purpose of soliciting new memberships. It was hoped that in this way state-wide membership might be increased to five or six hundred. This would mean an increase of about two hundred and fifty to three hundred new members.³⁴ It was not until 1913, however, that Dr. J. L. Stewart was selected as state organizer, given \$300.00 as an expense account, and instructed to "secure new membership."³⁵ In his first report to the state association a year later, Dr. Stewart boasted of seventy-three new names. However, because he failed to collect the dues at the time, his efforts were not so rewarding as they might have been.³⁶

33. **South Dakota State Medical Association**, 1904-1914, 1912 annual session.

34. **Ibid.**, taken from the Proceedings of the House of Delegates, 1909 annual session.

35. **Ibid.**, taken from the Proceedings of the House of Delegates, 1913 annual session.

36. **Ibid.**, taken from the Proceedings of the House of Delegates, 1914 annual session.

(To Be Continued in February)

ARE YOU TAX BAIT?—

(Continued from Page 8)

past 3 years and to see if that income tallied with his income as reported on the returns. They asked the Doctor for a list of his assets as of 3 years ago and as of now and figured out the increase. Then they looked at his tax returns as filed for the past 3 years to see what he had left after paying taxes. Then they wanted to know what his fair estimates of his living expenses were for the past 3 years.

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**REPORT ON ACTIONS OF THE HOUSE
OF DELEGATES
AMERICAN MEDICAL ASSOCIATION
TENTH CLINICAL MEETING
NOV. 27-30, 1956
SEATTLE, WASH.**

Medical ethics, veterans' medical care, radio-active isotopes, continuance of the A.M.A. interim session, hospitalization for patients with alcoholism and a report of the Committee on Medical Practices were among the wide variety of subjects acted upon by the House of Delegates at the American Medical Association's Tenth Clinical Meeting held Nov. 27-30 in Seattle.

Dr. Edward M. Gans of Harlowton, Montana, was announced at the opening session Tuesday as the 1956 General Practitioner of the Year. The annual award, carrying with it a gold medal and a citation, is presented to a family doctor selected by a special committee of the Board of Trustees for outstanding community service. Dr. Gans, who is 80 years old, has practiced medicine for 51 years and has been in the Harlowton area for the past 44 years.

Strongly condemning government intervention in medicine, Dr. Dwight H. Murray of Napa, Calif., A.M.A. President, told the opening session that "the medical profession, along with business and industry, is caught between those who desire to promote sound government programs and those who desire even more intensely to perpetuate party politics. Unfortunately, in recent years a benevolent federal government appears more attractive to the voting public than the preservation of individual freedoms. Medicine must do its utmost to reverse this trend."

Total registration at the end of the third day of the meeting, with half a day still to go, had reached 5,191, including 2,738 practicing physicians and 2,453 residents, interns, medical students, nurses and guests.

Medical Ethics

Subject of greatest interest at Seattle was the proposed, ten-section revision of the Principles of Medical Ethics originally submitted at the June, 1956, Annual Meeting in Chicago, where final action was deferred until the Seattle session. The proposed short version

of the Principles was resubmitted this week, with some changes based on suggestions received since last June by the Council on Constitution and By-Laws. The House of Delegates, however, decided to refer the matter back to the Council on Constitution and By-Laws for further study and consideration. The reference committee report adopted by the House included the following statements:

"Careful consideration was given to the Preamble and the ten sections of the proposed Principles. The Preamble and seven of the ten sections appear to be acceptable in their present form.

"Sections 6 and 7 were not acceptable as presented either to the group which appeared at the hearing or to your reference committee.

"Out of the general discussion the reference committee received the crystallized opinion that at least four areas needed more specific attention in Sections 6 and 7. These are:

- "(1) Division of fees;
- "(2) The dispensing of drugs and appliances;
- "(3) The corporate practice of medicine;
- "(4) Greater emphasis concerning the relationship between physicians and patients.

"In addition, the reference committee felt that the wording in Section 10 could be improved if amended to read as follows:

"The responsibilities of the physician extend not only to the individual but also to society and deserve his interest and participation in activities which have as their objective the improvement of the health and welfare of the individual and the community.'

"In view of the above your reference committee believes that the proposed Principles of Medical Ethics should be referred back to the Council on Constitution and By-Laws for further study and consideration of the above stated principles.

"In the short space of time at our disposal and in view of the importance of the subject, your reference committee did not deem it wise to attempt to properly phrase these concepts.

"We would also recommend that if possible this study be completed at least six weeks prior to the June session and the new version be published in THE JOURNAL in order that all interested physicians might have an opportunity to comment thereon."

Veterans' Medical Care

The House revised A.M.A. policy on veterans' medical care by endorsing in principle the following paragraph suggested by the Council on Medical Service:

"With respect to the provision of medical care and hospitalization benefits for veterans in Veterans Administration and other federal hospitals that new legislation be enacted limiting such care to veterans with peacetime or wartime service whose disabilities or diseases are service-incurred or aggravated."

This action eliminates the temporary exceptions which were made in the June, 1953, policy regarding wartime veterans who are unable to defray the expenses of necessary hospitalization for non-service-connected cases of tuberculosis or psychiatric or neurological disorders. In making the policy change, the House approved this supplementary statement:

"We recognize the laws and administrative extensions of the law that are now in operation. We feel that under the circumstances it will be the best interests of the public in general, and veterans in particular, if medical societies, county and state as well as national, develop committees to assist in guaranteeing VA hospital admission to service-connected cases. While the present law exists, we should help assure that veterans whose illness constitutes economic disaster will not be displaced by those suffering short-term remediable ills which, at the worst, constitute financial inconvenience."

In another action concerning veterans, the House passed two resolutions condemning as unlawful the practice of Veterans Administration hospitals which admit patients who are covered by workman's compensation insurance or by private health insurance and which render bills for the cost of their care. Both resolutions requested the A.M.A. to

take action to bring about a discontinuance of such practices by VA hospitals, and one of them instructed the Association Secretary to obtain from each state testimony or records of each known case that violates VA Reg. 6047-D1.

Radioactive Isotopes

The House rescinded the June, 1951, action, which limited the hospital use of radium and radioactive isotopes to board-certified radiologists, by approving a new policy statement which says:

"(1) In any hospital in which a patient is to receive radium or the products of radium or artificially produced isotopes, there should be a duly appointed Committee on Radium and Artificially Produced Radioisotopes of the hospital professional staff. This committee should include, but not necessarily be limited to, the following qualified physicians: a radiologist, a surgeon, an internist, a gynecologist, a urologist and a pathologist. This committee should have available such competent consultation of other physicians and scientific personnel as may be required by it. Where this is not practicable, the hospital staff should consult the nearest Committee on Radium and Artificially Produced Radioisotopes.

"(2) In any hospital, the use of radium or its products and artificially produced radioactive isotopes for diagnostic or therapeutic purposes shall be restricted to qualified physicians so judged by the Committee on Radium and Artificially Produced Radioisotopes of the professional staff to be adequately trained and competent in their particular use.

"(3) It is recommended that procurement, storage, dosimetry control and inventory of all radioactive isotopes for the use of the hospital staff and radiological safety control be centralized, and, where administratively possible, centralization be located in the Department of Radiology.

"(4) It is recommended that the Board of Trustees assign to the appropriate council or committee the continuous study of the problems of radiological safety control in the use of radium and its products and artificially produced radioactive isotopes for diagnostic or therapeutic purposes."

Clinical Meetings

Rejecting a resolution which recommended discontinuance of the interim sessions, or

clinical meetings, the House adopted a reference committee report which said:

"We believe that the interim sessions should be continued because of the public relations value of these meetings to the Association and the educational value to physicians and the general public in the various geographical areas involved.

"It is the suggestion of the reference committee that maximum attention be given to these potential benefits in selecting a city for the interim meeting.

"It is our further recommendation that the Board of Trustees consider the advisability of holding an Interim Meeting of the House of Delegates in Chicago each November or December and an Interim Scientific Session in November or December of each year in different parts of the United States. The reference committee suggests that the views of the Board of Trustees in this regard be reported to the House of Delegates next June."

Hospitalization for Alcoholics

To implement educational approaches to the problem of alcoholism, the House approved a statement submitted through the Board of Trustees by the Council on Mental Health and its Committee on Alcoholism. The House also recommended that the statement be brought to the attention of the Council on Medical Education and Hospitals, the Joint Commission on Accreditation of Hospitals and the American Hospital Association. It includes the following:

"The Council on Mental Health urges hospital administrators and the staffs of hospitals to look upon alcoholism as a medical problem and to admit patients who are alcoholics to their hospitals for treatment, such admission to be made after due examination, investigation and consideration of the individual patient. Chronic alcoholism should not be considered as an illness which bars admission to a hospital, but rather as qualification for admission when the patient requests such admission and is cooperative, and the attending physician's opinion and that of hospital personnel should be considered. The chronic alcoholic in an acute phase can be, and often is, a medical emergency."

Committee on Medical Practices

In approving a progress report of the Committee on Medical Practices, the House amended one of its directives to read as follows in

order to remove any legal objections:

"The A.M.A. representatives on the Joint Commission on Accreditation of Hospitals be instructed to stimulate action by that body leading to the warning, provisional accreditation, or removal of accreditation of community or general hospitals which exclude or arbitrarily restrict hospital privileges for generalists as a class regardless of their individual professional competence where such policies adversely affect the quality of patient care rendered. Any action taken should be only after appeal to the Commission by the county medical society concerned."

The House also approved a recommendation by the Committee on Medical Practices that a study group be formed to consider the best background preparations for general practice, and it urged that such action be implemented as soon as practicable.

Miscellaneous Actions

Among many other actions on a wide variety of subject, the House of Delegates also:

Urged the widest possible publication and distribution of Dr. Murray's **presidential address** at the opening session;

Pledged the full support of the Association's initiative and energy to President Eisenhower's **people-to-people program** as a means of promoting understanding, peace and progress;

Directed the Board of Trustees to continue its investigation of the practicability of developing a **statement of A.M.A. policies** and to arrange for the periodic publication of revised versions of such a policy statement;

Commended the objectives of the American Association of **Medical Assistants** and its sincere desire to work closely with the medical profession in improving medical service and medical public relations;

Noted with pride the good work being done by the 74,348 members of the **Woman's Auxiliary**, as reported to the House by Mrs. Robert Flanders, President;

Directed the Councils on Pharmacy and Chemistry and on Foods and Nutrition to conduct a joint study of all presently available information concerning the **fluoridation of public water supplies** and to present a documented report of findings and recommendations at the December, 1957, meeting;

Urged all physicians to participate actively in the formulation of medical policy for

prepaid medical care plans which are under physician direction or sponsorship;

Changed the By-laws to extend **service membership** to reserve officers on extended active duty with the defense forces and the U. S. Public Health Service;

Changed the By-laws relating to **transfer of membership** so that an active or associate member of the Association who moves his practice to another jurisdiction may continue his A.M.A. membership by applying for membership in the constituent association in his new jurisdiction, subject to a two-year limit on approval of his application;

Changed the By-laws so that the **election of officers** may take place at any time on the fourth day of the annual session, instead of being restricted to the afternoon of that day;

Passed a resolution calling for the American Medical Association to join with the American Hospital Association and the American Institute of Architects in their proposed **study of hospital design and construction**;

Approved the principle of a voluntary reduction in the self-assigned **quota of interns** as printed in the 1956 handbook of the National Intern Matching Program, and

Instructed the Board of Trustees to accentuate cooperation between the American Medical Association and the American Bar Association to the end that a bill of the **Jenkins-Keogh** type be enacted at the next session of Congress.

Opening Session

At the Tuesday opening session Dr. Murray, on behalf of the American Medical Association, presented a special citation to Ciba Pharmaceutical Products, Inc., for "the service it has performed to the medical profession and to the nation through its weekly television series, 'Medical Horizons'." At the same session the American Medical Association and four of its constituent societies—California, Arizona, Utah and New Jersey—contributed nearly \$300,000 to the American Medical Education Foundation for aid to the nation's medical schools. The A.M.A. announced another gift of \$125,000, bringing this year's total contribution to \$343,000. The amounts presented by the four states were: California, \$132,981; New Jersey, \$25,000; Utah, \$11,870, and Arizona, \$3,695.

Arthur A. Lampert, M.D.
Delegate

CLINICAL REVIEWS

Mayo Clinic

and

Mayo Foundation

ROCHESTER, MINNESOTA

April 1, 2 and 3, 1957

Staff members of the Mayo Clinic and the Mayo Foundation for Medical Education and Research will present again this year a three-day program of lectures, discussions and demonstrations on problems of current interest in general medicine and surgery.

Up to twenty-one hours of Category I credit may be obtained by American Academy of General Practice members who attend.

There are no fees for this program.

The number of physicians who can be accommodated is necessarily limited. Those wishing to attend should communicate with Mr. R. C. Roesler, Mayo Clinic, Rochester, Minnesota.

MEDICAL LIBRARY BOOKSHELF



The Student American Medical Association of the University Medical School is initiating an annual science lectureship. On November 16th, the students sponsored a dinner at the East Hall dining room followed by the first lecture in the series. They were fortunate in having Dr. Horace W. Magoun for their speaker; an anatomist internationally known as an authority on nerve mechanisms associated with the activation of the cerebral cortex.

Dr. Weeks, President of the University, in an after dinner talk, congratulated the medical students on undertaking the science lectureship and emphasized the need for taking an interest in the "many splendored things of life" offered by the University outside of their own professional field.

Previous to his lecture Dr. Magoun referred to Dr. Week's remarks and stated that what we in South Dakota take for granted and hardly notice such as the snow and the bare branches of the trees silhouetted by the moon along our village streets was to him, coming from California, a "many splendored sight."

According to **American Men of Science** (V. 2 The Biological Sciences) Dr. Horace Winchell Magoun received his Ph.D. in anatomy from Northwestern in 1934. He advanced from assistant in neurology at Northwestern in 1934-37 to a full professor of micro-anatomy from 1942-50, after which he joined the anatomy staff of the University of California Medical School in Los Angeles.

His lecture on the "Waking Brain" was based on experimentation being carried on in the Department of Anatomy at the University of California and was illustrated by slides giving historical information about the studies of the brain, the men noted for their contribution to the subject and the results of

his research in which the unit activity in the central cephalic brain stem of cats was recorded.

The November, 1955 issue of **Journal of Neurophysiology** p. 547 contains an article written by Dr. Magoun and others on unit activity of Central Cephalic brain stem in EEG arousal. This study was aided from the Commonwealth Fund and the National Institute for Neurological Diseases and Blindness of the U. S. Public Health Service.

The interest to electroencephalography, is the relation of discharge of component cerebral neurons to the broader patterns of potential change which characterize the EEG record of activity of the brain. One of these changes having implications for psychology is the replacement of large amplitude slow waves of low-voltage fast discharge with the association of arousal from sleep or alerting to attention.

According to the summary, the behavior of individual neurons in the central cephalic brain stem of the cats used for the experiment was explored during EEG synchrony, induced with small doses of chloralose and midbrain lesions, and during EEG arousal, induced by afferent or central stimulation.

"Three main types of unit-response were elicited by single sciatic shocks. Units which discharge repetitively during the evoked potential were silent during the positive deflection and exhibited succeeding after-discharge. Units which did not fire in association with the evoked potential were subsequently either caused to discharge or to discharge more frequently for several seconds. Less commonly, the frequency rate decreased or the unit would stop firing briefly."

The bearing of these findings on interpretation of EEG changes is varying. Instances

of inhibition or reduction of neuronal firing favor the concept of blocking or suppression. Breakup of ground firing associated with spindle burst waves supports that of desynchronization. The predominant observation of augmented firing and recruitment indicates that terms connoting an excitatory process or 'EGG arousal' or 'activation' are the most appropriate."

Dr. John Pirsch of our anatomy staff has carried on considerable research in brain stimulation of cats at the University of Iowa and at the present time in our medical school. An abstract of a paper presented before the 67th annual session of the American Association of Anatomists is to be found in **Anatomical Record** V. 118, 1954, p. 392. This is entitled "Electroencephalographic and Behavioral Effects of Stimulation of Certain Points in Diencephalon and Forebrain of Unanesthetized Cats."

In this experiment using a variety of stimulus parameters, various points within the brain were stimulated with bipolar implanted electrodes and cortical and deep potentials were recorded.

A paper by Dr. Pirsch entitled "The Early Appearance of Spindle Formation in the Thalamus During Drowsiness and Sleep in Cats" will appear in a forthcoming issue of **EGG and Clinical Neurology**.

Mrs. Esther Howard
Medical Librarian

CASE REPORT—

(Continued from Page 6)

the size of the spleen itself. A splenectomy was done.

During the subsequent course of the hospitalization the patient received five pints of blood. She made an uneventful recovery and was discharged the 8th hospital day.

Pathological examination of the spleen: "The spleen measured 11 x 15 x 3 cm. There

is an extensive irregular laceration along one margin. Much of the capsule has been lifted away from the spleen by a hematoma and areas of hemorrhage extended deep beneath the surface laceration. Microscopic section: Show acute hemorrhage in the spleen. The spleen itself is normal."

The interesting thing in this case is the fact there was no history of direct trauma. The patient did say however, "that two days before she became ill, their car had been stalled and she was helping to push when she slipped, but also stated she did not strike any portion of her body against any hard object. She stated she thought she "strained her back." This, a so called "trivial" injury was sufficient to produce a splenic rupture with a sub capsular hematoma that gradually enlarged over a 48 hour period. The classic picture of profuse intra-abdominal hemorrhage not appearing before the rupture of the capsule.

"Position vacancy, General Practice Residency, two years, Stanislaus County Hospital, Modesto, California, 400 beds, hospital fully approved by the Joint Commission of Accreditation; Salary \$500.00 per month. Address communications to Dr. Allan A. Craig, M.D., Stanislaus County Hospital, Modesto, California."

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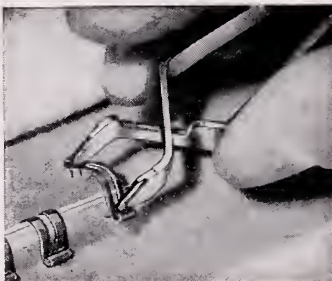
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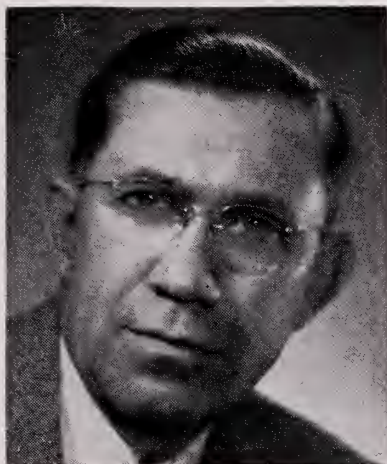
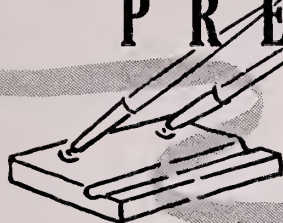
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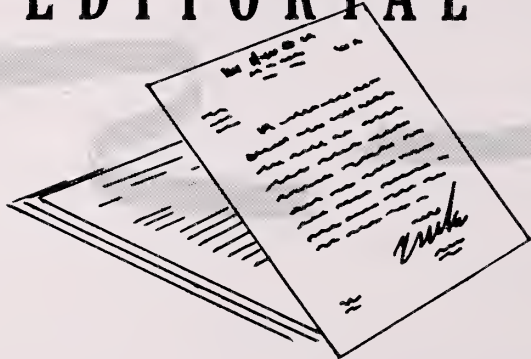
Between the passing of the old year and the beginning of the new comes the time for pause and reflection. We look back on the problems confronting our State and National Medical Associations and the legislation which has been passed, such as H.R. 7225. All has not been lost because, the Congress, according to Karl Mundt has developed a high regard and respect for the stand the medical profession took when it looked as though it was all but an accomplished fact to socialize insurance, banking and utilities. At that time it was touch and go whether we would still have freedom as we now know it or go down the road to socialism.

In the coming year, let us strive to do a better job in our own field and to cooperate with the other professions to make South Dakota and the United States a better place to live and work in. We are meeting with the members of the legal profession to acquaint ourselves with the problems that are mutual to us. We can get a better understanding of their procedures which may have caused us some irritation and by the same token they can become more intimate with our problems and procedures. In this vein of mutual interest and understanding we can go on to accomplish greater things for our community and state.

Yours truly,

Alonzo P. Peeke, M.D.

EDITORIAL PAGE



POST GRADUATE EDUCATION

This generation of physicians is fortunate in having more opportunities for post graduate training than have been enjoyed by any other generation. Much of this is due to the demands of the American Academy of General Practice. This organization requires of its members a definite amount of approved post graduate study over a period of three years; failure of any member to meet these requirements after grace period of one year results in automatic loss of membership. The various American specialty boards might well follow this example.

In addition to the courses offered general practitioners at the Academy meetings, national, state and regional meetings, many other opportunities exist for study. In this state the Dean of our Medical School offers a course each spring, based on the physician's wishes and needs as expressed to him by questionnaire. Adjacent states offer short residence courses in numerous fields. Tape recordings of advances in the post graduate field may be subscribed to by those interested, for a very nominal fee. The latest additions to the post graduate field are correspondence courses which cover practically all the speciality fields.

In looking forward to the year of 1957, every physician should plan to improve himself and his service to his patients by taking advantage of these various courses. One returns to his practice refreshed and with new enthusiasm. Old patients are seen from a new perspective; often many of their vexing problems can simply be solved by some new ideas which were given in a post graduate course.

R. E. V.

TUBERCULOSIS TESTING IN SCHOOLS

Since every case of Tuberculosis comes from another case, it is not until we can break this chain that the disease can be conquered. Early Tuberculosis has no symptoms of any kind. By the time such symptoms as chronic cough, fever, and pain in the chest are present, Tuberculosis is past its early stages.

The object of mass Mantoux testing of school children, teachers, and school personnel is to find all persons who react to Tuberculin, examine them promptly, and thus screen out those few at the moment may have clinical disease.

The main object of re-testing the school children, teachers, and school personnel every two years, is to discover those whose reaction has changed from negative to positive, examining them periodically, so that those who develop contagious disease may have it found and treated before the germs escape and find residence in the bodies of their associates.

Some people ask why we do not use and rely on the mobile x-ray unit in this school work. The mobile x-ray unit is also a valuable screening process, but the answer is that x-ray detects only gross pathology. Much damage may be done by the time pathology is located by x-ray film. Moreover, twenty-five percent of the lungs is not visualized in the routine x-ray film because of the density of other structures, such as the heart and diaphragm.

It is estimated that one third of the 400,000 active cases of Tuberculosis in the United States are undetected. The Tuberculin test is capable of screening them out accurately.

MEDICARE STARTS

The Military Dependents Medical Care program was inaugurated in South Dakota on December 7th. First claims were reported immediately after the starting date of the program.

As in any program of the magnitude of "Medicare" bugs have appeared that have taken some "ironing out."

A physicians handbook has been printed and the fee schedule is in the process of being mailed.

While it would be impossible to go into all the ramifications of the program, we cannot emphasize too strenuously the necessity of maintaining "normal" charges no matter what the negotiated fee schedule might list.

Only by keeping the program reasonable both from the standpoint of cost of services and cost of administration, can we prove our ability to stay on top of it.

Your cooperation will make it successful.

MEDICINE'S CONTRIBUTION TO WORLD PEACE

Medicine is universally recognized as one of the great world-wide arts and sciences that bind humanity together with a language and a purpose transcending all differences of race, creed or color.

To make the language of medicine more articulate in the cause of international peace and human progress, the doctors of the free world are united in The World Medical Association, whose membership now embraces 53 national medical associations.

But it is never enough to establish great institutions. Only when **individuals** are given an opportunity to plan an active part does any human organization "come alive" and begin to realize its basic purposes.

Every American doctor knows first hand the vital role he may play in guiding and protecting his profession by becoming an active member of his county, state and national medical societies.

Today, every American doctor has the opportunity — and the imperative challenge — to help make our profession a stronger influence for world peace. This he may do by joining our own United States Committee of The World Medical Association.

Similar "supporting committees" have been organized in a number of other leading nations whose national medical societies, like the A.M.A., are members of W.M.A.

In a timely action, W.M.A., at its 10th General Assembly in Havana in October, adopted a six point program to implement one of its constitutional purposes: to promote world peace. This program includes the development of mutual exchange visits of foreign doctors; exchanges of distinguished medical teachers; establishment by each W.M.A. member national association of an "international visitor's bureau"; stimulation of visits by representatives of member associations to the annual meetings of other member associations; holiday exchange programs between doctors and their families; and exchanges of test books and medical and scientific publications.

To implement this program takes money — and interested members. YOU may play your part by joining the U. S. Committee of W.M.A. Active membership dues for 1957 are \$10.00. To join the U. S. Committee — and to learn how you can contribute to this great cause — communicate with your executive office.

POST-GRADUATE SESSIONS OFFERED MEDICAL SCHOOL


The clinical and the basic science staff of the State University of South Dakota School of Medical Sciences announce post-graduate sessions on water and electrolyte balance to be held April 6, 7, 8, 9, at the Medical Science Building at Vermillion. Consideration of fundamental and basic concepts will be followed by sessions dealing with clinical cases.

Bedside determinations for total base, bicarbonate, and chlorides will be done on blood, urine, vomitus, etc. and charted on water and electrolyte balance sheets.

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A black and white photograph showing a person in a dark coat standing behind the large, stylized letters of the word 'MYCIN'. The person's face is partially visible in the upper right corner, looking down at the letters. The letters are made of a light-colored material, possibly wood or metal, and are arranged in a row. The background is dark.

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ABERDEEN DISTRICT MEETS

The Aberdeen District Medical Society held its regular monthly meeting on Wednesday evening, December 5th. About 30 Doctors and their wives were present at the dinner meeting in the Alonzo Ward Hotel. The following officers were elected for 1957:

President — **Dr. B. F. King,**
Aberdeen

Vice President — **Dr. Agnes Keegan,** Aberdeen

Secretary-Treasurer — **Dr. W. E. Gorder,** Aberdeen
(reelected)

Dr. M. R. Gelber, Aberdeen, was elected to a three year term as a Director. **Dr. E. J. Perry,** Redfield, has two years left of his term as Director, and **Dr. P. V. McCarthy,** Aberdeen, one year left of his term. **Dr. Mary E. Sanders,** Redfield, was elected to a three year term on the Board of Censors. **Dr. J. C. Rodine,** Aberdeen, still has two years to serve; and **Dr. P. G. Bunker,** Aberdeen, has one year to serve.

Dr. E. A. Rudolph, and **Dr. J. L. Calene,** Aberdeen, were elected as Delegates for a term of two years; and **Dr. C. L. Vogeles,** and **Dr. G. H. Steele** were elected Alternate Delegates for a term of two years.

YANKTON DISTRICT ELECTS OFFICERS

Officers elected for the coming year were: **Dr. Duane Reaney,** president; **Dr. Robert S. Monk,** vice-president; **Dr. Amos Michael,** Vermillion, secretary; and **Dr. Willis Stanage,** treasurer. The outgoing president is **Dr. Marian Auld.**

Dr. Hugo Andre, Vermillion, was added to the district board of censors, which passes on new applications for membership in the district association.

The meeting opened with a 7 P. M. banquet at the Hotel Charles Gurney. This was followed by the business meeting, which featured an address by Prof. Clark Gunderson, professor of law at the University of S. D., Vermillion, on "Medical Jurisprudence."

A new member received into the district Medical Society was **Dr. Thomas Price, Jr.,** Yankton.

PIERRE DISTRICT HEARS DR. MCCARTHY

Dr. Paul McCarthy, Aberdeen, addressed 22 members of the Pierre District Society at their regular meeting, December 12th at the Pierre Clinic on radiological diag-

nosis of the gastro-intestinal tract.

John C. Foster, Medical Association executive secretary discussed the military dependents medical care plan.

Officers elected for the coming year were **Drs. S. B. Simon,** President; **R. C. Jahraus,** Vice-president; **J. T. Cowan,** Secretary-treasurer; **C. L. Swanson,** delegate, and **S. W. Fox,** alternate delegate.

MADISON MEDIC NAMED TO HEAD STATE GROUP

Dr. H. R. Wold, Madison, was elected president of the South Dakota Chapter of the American Academy of General Practice at the group's annual meeting in Huron, Sunday, December 9th.

Other officers elected were **Dr. C. A. Johnson,** Belle Fourche, president-elect; **Dr. C. J. McDonald,** Sioux Falls, vice president; and **Dr. Magni Davidson,** Brookings, secretary-treasurer.

Delegates named to the national academy meeting were **Dr. John Hagin,** Miller; and **Dr. A. P. Reding,** Marion, with **Dr. E. T. Lietzke,** Beresford, and **Dr. Magni Davidson,** Brookings, as alternates.

FEEHAN NAMED BLACK HILLS PREXY

Doctor John J. Feehan, Rapid City, was named president of the Black Hills District Medical Society at their regular meeting held December 13, at the Homestake Club in Lead.

Doctor C. A. Johnson, Belle Fourche, was elected vice-president and **Doctor Wayne Geib**, Black Hills, was re-elected secretary-treasurer.

The program consisted of a resume of a survey of the incidence of "Western Equine Encephalomyelitis" by **Doctor Pirtle** of the University Medical School.

Mr. Robert Driscoll, Lead attorney spoke on "Ramifications of the Jenkins-Keogh Proposal." John C. Foster, association executive-secretary discussed the Military Dependents Medical Care program.

There were about thirty-five Black Hills doctors in attendance.

PHYSICIANS ELECT DR. STRANSKY

Officers were elected when the Watertown District Medical Society had its monthly meeting at the Grand Hotel Tuesday night.

Newly elected are **Dr. John Stransky**, president; **Dr. S. W. Allen, Jr.**, vice-president; and **Dr. M. C. Rousseau**, secretary-treasurer.

Sen. Karl Mundt, guest speaker discussed the current international situation and also the recent attempts by the American Medical Association to block socialized medicine.

Dr. Don Fedt is the retiring president of the organization.

HURON DISTRICT DISCUSSES MEDICARE PLAN

Eighteen Huron District Medical Society members discussed the provision of the military dependents medical care act at their meeting, Friday, December 14th at the Marvin Hughitt Hotel.

John C. Foster, association executive secretary led the discussion and answered many questions on the operation of the program.

The doctors attended dinner with their wives prior to the discussion.

Officers elected for the year 1957 are president, **H. Saylor, Jr., M.D.**; Vice-president, **Ted Hohm, M.D.**; Secretary-treasurer, **David Buchanan, M.D.**; and delegate **Emil Hofer**.

DR. M. WELBES OF BRIDGEWATER DIES

Dr. M. A. Welbes, 58, Bridgewater's only doctor, died December 14th in a Sioux Falls hospital where he had been a patient for the past three months.

Funeral services were held December 17th in St. Stephen's Catholic Church with burial in the Catholic Cemetery.

Dr. Welbes had been a lifetime resident of Bridgewater. He attended Creighton University, Omaha, and interned in St. Joseph's Hospital in Omaha. He practiced a short time in Beresford before returning to Bridgewater where he practiced for more than 30 years.

He was born July 1, 1898, in Bridgewater.

Survivors include the

widow; two daughters, Mrs. Gene Garry, Sioux Falls, and Donna Olympia, Wash.; one son, George, student at the University of South Dakota; one sister, Mrs. Christina Garry, Sioux Falls, and two grandchildren.

J. A. HOHF, M.D. RECEIVES 50-YEAR PIN

Dr. J. A. Hohf was presented a 50-year South Dakota State Medical Association pin by **Dr. A. P. Peeke**, Volga, S. D. Medical Ass'n. president, at the district Medical Society meeting held December 5th at Yankton.

Dr. Peeke briefly reviewed Dr. Hohf's long record of accomplishment in the Yankton community, and Dr. Hohf responded with words of appreciation.

NEW ADVISORY GROUP TO STUDENT A.M.A.

Executive Secretary Russell Staudacher has announced appointment of a new national board of advisors which will guide and counsel officers of the Student American Medical Association in all matters pertaining to future policy of the organization, which is now entering its seventh year.

The six advisors, appointed for indefinite terms by the Association's executive council, follow:

Dr. David J. Buchanan, Huron, S. D., a past president of the Student A.M.A.; **Dr. Warren W. Furey**, Chicago, prominent radiologist who has served many years as a member of the A.M.A. House of Delegates;

Dr. Ernest B. Howard, Chicago, assistant secretary of the A.M.A.; Dr. Hugh H. Hussey, Washington, D. C., a member of the A.M.A. Board of Trustees; Dr. Dean F. Smiley, Chicago, secretary of the Association of American Medical Colleges, and Dr. Richard H. Young, Chicago, dean and professor of medicine at Northwestern University Medical School.

POSTGRADUATE COURSE IN DIABETES AND BASIC METABOLIC PROBLEMS

The American Diabetes Association will hold its Fifth Postgraduate Course in Dia-

betes and Basic Metabolic Problems at the Ohio State University Health Center, Columbus, Ohio, January 30, 31 and February 1, 1957.

The Course is open to members of the medical profession. The fee for the three-day Course for members of the American Diabetes Association is \$40 and \$75 for non-members. The Deshler Hilton in Columbus will serve as the headquarters hotel. The American Academy of General Practice will give 22 hours Postgraduate Credit for the Course.

For further information and registration forms, write to: American Diabetes Association, 1 East 45th Street, New York 17, N. Y.

S. D. BLUE SHIELD PAYS 1ST CLAIM

South Dakota's Blue Shield program paid its first claim December 19th. The plan started sales in October but little momentum was developed until late in November. Sales are increasing rapidly and many South Dakotans are asking more information on the coverage.

Recipient of the first claim payment was a Sioux Falls surgeon who performed surgery on the wife of a subscriber enrolled in the Ministerial Association group.

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JANUARY 1957

PHARMACEUTICAL SECTION



HAROLD S. BAILEY, PH.D.
EDITOR

Division of Pharmacy
College Station, South Dakota

PHARMACEUTICAL *Paper*



VETERINARY MEDICINE AND THE PHARMACIST*

II. Antibiotics and Farm Sanitation

Lawrence W. Price, D.V.M.**

Chicago, Illinois

Farming in America is mechanized and the farmer more advanced in technical training than ever before. He has improved his buildings and his equipment and he follows such scientific agricultural procedures as crop rotation and contour plowing. There is one phase of farming, however, that those of us connected with animal health cannot seem to get across to the farmer. This is the matter of sanitation. The farmer still wants the pink pill to put in the water to do the job he himself should be doing.

Farm sanitation is an extremely important consideration in animal health. The farm has a complex bacterial environment. Laboratory examination will show virtually any kind of gram positive and gram negative organisms as well as protozoan and parasitic agents. This is why the sulfonamides and certainly the narrow spectrum antibiotics fail to be a "crutch" as far as the farmer is concerned. The farmer does not realize and does not understand that penicillin, tyrothricin, gramicidin, bacitracin and some of our other products are efficient only against gram positive organisms. We need a farm education program concerning the matter of sanitation. We need to persuade the farmer that prevention of disease through farmyard sanitary control is as good an investment as the purchase of the latest type of mechanical equipment.

*This is the second of a series of three papers devoted to veterinary medicine and the pharmacist.—Ed.

**Associate Director, Veterinary Professional Service, Lederle Laboratories Division, American Cyanamid Co.

The pharmacist, as well as the veterinarian, could contribute a great deal to animal health medicine by actively engaging in this type of an educational program.

Antibiotic Medication

The narrow spectrum antibiotics such as penicillin, dihydrostreptomycin and the others previously mentioned have a limited use today in veterinary therapeutics. In those instances where a specific infection has struck, penicillin, streptomycin or a combination of the two may be effective. Of course, there is always the possibility that the natural resistance of the animal has eliminated the trouble causing agents with the penicillin only eliminating the gram positive organisms. We may have assisted in the process of recovery by the use of these narrow spectrum antibiotics but we have not attacked the basic cause of the disease.

One of the more serious faults associated with narrow spectrum antibiotic therapy is that most of them are destroyed by the gastric juices. Also, several of these drugs are very poorly absorbed in the intestinal tract. For these reasons high blood levels cannot be obtained nor is the blood level constant. This is particularly true with streptomycin and bacitracin. Oral dosage, therefore, is not practical and parenteral administration is necessary.

Another serious disadvantage with narrow spectrum antibiotics is the tendency for resistant strains of bacteria to develop. Not only do these resistant strains develop readily but they grow quite rapidly.

Broad Spectrum Antibiotics

Most of the objections discussed in connection with the narrow spectrum antibiotics are not associated with the drugs we call the broad spectrum antibiotics.

The administration of these drugs, such as Aureomycin, Terramycin and Achromycin, result in high blood levels that are maintained at a fairly constant level for long periods of time. Also, as yet, we have not discovered any true pathogenic bacterial strains in the field of veterinary medicine that are resistant to these antibiotics.

Another advantage of these drugs over the narrow spectrum antibiotics is that the tetracycline derivatives are not rendered inactive by the gastric secretions and are readily absorbed from the gastro-intestinal tract. For these reasons oral administration is feasible and the use of antibiotics in drinking water and in feed supplements is well known.

Growth Stimulation

Soon after the introduction of these broad spectrum antibiotics in veterinary medicine, it was found that low levels of the drugs would stimulate animal growth. It has also been found that there is no toxicity or residual concentration of drug accompanying the dramatic growth response.

At present, growth stimulation is being accomplished with tetracycline in the feed at a level of from 12 to 50 grams per ton. In the case of water soluble products usually one teaspoonful to about four gallons of drinking water accomplishes the same result.

How is this dramatic growth stimulation accomplished? Actually, there is no mysterious mechanism involved. The complex bacterial environment of the farm competes with the animal for the protein, fat and carbohydrates of the feed. The more of these bacterial agents eliminated by the antibiotics, the better the animal is able to compete for the available feed.

This theory has been substantiated by the results of several large research projects at Notre Dame University. In these experiments, pigs and chickens were born and raised in a completely sterile environment. The feed, water and air that enters this environment is absolutely sterile. It is completely free from bacteria and is also sterile from a viril and a parasitic population. The administration of an antibiotic at any dosage

level to these pigs and baby chicks results in no growth stimulation whatever. However, if the animals are exposed to a normal bacterial and viril environment for measured lengths of time, the growth stimulatory effect of the antibiotic is demonstrated.

The use of antibiotic feed supplements is economically valuable to the farmer and is completely safe as we have demonstrated to our satisfaction and the satisfaction of the Federal Food and Drug Administration many times.

Recommendations for Antibiotic Feeds

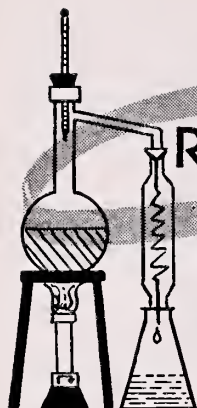
As pharmacists you may be called upon to recommend dosage levels of antibiotic to the farmer for growth stimulation. Remember that what we are actually trying to do is to match the level of sanitation on that farm with a comparable level of antibiotic. I would recommend, first, a 50 gram per ton antibiotic level in the feed or the equivalent of that in the drinking water for 10 days. Then, suggest that this level be cut in half for another 10 day period. If growth stimulation and the well being of the animals continue, cut the antibiotic in half again. In this crude but practical way we are attempting to reach the level of infection or, shall we say, attempting to reach the level of sanitary mismanagement on which the farmer is operating his livestock project.

By this method we will attempt to produce maximum results with a minimum amount of cost. Certainly, the farmer will feel that you have done a professional service for him if he obtains results on lower antibiotic feed levels. Several farmers of my acquaintance have used antibiotic feeds or drinking water for a period of two or three years. At the present time they are obtaining growth stimulation on extremely low levels of antibiotics. Here again the level of antibiotic needed is directly proportional to the bacterial environment of the farm.

Now let us consider therapeutic levels of antibiotic. A high therapeutic level of antibiotic is considered to be from 50 to 200 grams per ton of feed. The equivalent of that would roughly be one to two teaspoons per gallon of drinking water.

These high therapeutic levels are very efficient against intestinal or respiratory infections. Another point to keep in mind is

(Continued on Page 35)



RECENT PHARMACEUTICAL *Specialties*

ALBAMYCIN SYRUP

Description: A pleasant flavored syrup containing the antibiotic albamycin (novobiocin).

Indications: Albamycin is indicated in the treatment of staphylococcic infections, particularly in patients who are sensitive to other antibiotics, and in infections in which the causative organism is resistant to other antibiotics. Albamycin possesses a significant index of sensitization.

Dosage: Adults: 1 gm. initially followed by 250 mg. every 6 hours or 500 mg. every 12 hours, continued for at least 48 hours after all evidence of infection has disappeared. For children, the dosage is 15 mg. per kilogram of body weight per day, administered on a similar schedule.

How supplied: Bottles of 2 oz. and one pint.

Source: Upjohn.

ALBA-PENICILLIN CAPSULES

Description: Each capsule contains albamycin (novobiocin sodium) 250 mg., and Penicillin G Potassium 250,000 units.

Indications: Indicated in the treatment of infections due to organisms susceptible to albamycin or penicillin or to the combination of the two. The combination is indicated primarily in mixed infections and in those infections where the invading organism is more susceptible to the combination of albamycin and penicillin than to either antibiotic alone.

Dosage: The recommended dosage is one or two capsules three times a day depending on the severity of the infection. In Proteus infections the recommended dose is one capsule four times a day.

How supplied: Bottles of 16 capsules.

Source: Upjohn.

CORDEX-FORTE (BUFFERED)

Description: A combination of acetylsalicylic acid 300 mg., prednisolone, 1.5 mg., and calcium carbonate 200 mg.

Indications: Aspirin steroid therapy for the relief of mild musculoskeletal inflammatory conditions.

Dosage: One to two tablets four times a day.

How supplied: Bottles of 100 and 500 tablets.

Source: Upjohn.

T. H. AND M. COUGH SYRUP

Description: A syrup containing in each teaspoonful terpin hydrate, 85 mg., and dextromethorphan HBr, 10 mg.

Indications: A non-narcotic cough sedative effective in alleviating cough associated with the common cold, laryngitis, trachitis and bronchitis.

How supplied: Pint bottle.

Dosage: Adults, 1 to 2 teaspoonfuls, one to 4 times daily. Total daily dose should not exceed 8 teaspoonfuls. Children, dosage varies with the age of the child.

Source: Upjohn.

ANTEPAR WAFERS

Description: Each wafer contains the equivalent of 500 mg. Piperazine hexahydrate.

Indications: A new dosage form of Antepar for the treatment of pinworms and roundworms.

How supplied: Boxes of 28 wafers in plastic strip packing.

Source: Burroughs Wellcome & Co.

SUL-SPANSION

Description: Each teaspoonful contains 0.65 gram of sulfaethylthiadiazole in micro-pellet form for sustained release.

Indications: A pharmaceutically unique sustained release form designed to produce high and prolonged blood and urine levels of sulfonamide throughout a 24 hour period

with a single dose every 12 hours. A broad spectrum antibacterial of value in the treatment of respiratory, urinary and other systemic infections.

Dosage: Adults and children over 75 pounds: two tablespoons initially, then one tablespoon every twelve hours. Children: One to four teaspoonfuls initially depending on body weight, then $\frac{1}{2}$ to 2 teaspoonfuls every 12 hours.

How supplied: Eight ounce bottles.

Source: Smith, Kline and French.

COMPAZINE TABLETS

Description: Tablets containing 5 mg. of prochlorperazine dimaleate.

Indications: 1. Mental and emotional disturbances — mild and moderate — whether occurring alone or in association with somatic conditions. Used successfully in anxiety, agitation, agitated depression, tension, confusion, restlessness, senile agitation, and post-alcoholic states.

2. Nausea and vomiting — mild and severe — of widely varying etiologies, with dramatic results in severe and refractory cases. Particularly effective in the nausea and vomiting of pregnancy. In ordinary vomiting of the first trimester, relief is usually provided within a short time after one 5 mg. oral dose.

Dosage: Dosage varies with the individual. In most patients, doses of 5 mg. three or four times a day are effective. Some patients require 10 mg. three or even four times a day. **Only in the rarest instances should the latter dosage be exceeded.**

Children over 12 should use the lower adult dosage. As yet no dosage has been established for children under 12.

At present Compazine is recommended for relatively short-term therapy (not longer than two weeks).

How supplied: Bottles of 50 and 500.

Source: Smith, Kline and French.

V-CILLIN SULFA PEDIATRIC

Description: A combination of 200,000 units of penicillin V and 167 mg. each of sulfadiazine, sulfamerazine and sulfamethazine per teaspoonful. Supplied in a dry granule form to be reconstituted by the pharmacist.

Indications: For the treatment of all infec-

tions known to respond to penicillin therapy. The combination of V-cillin and the triple sulfas provides a broader spectrum of antibacterial activity and tends to prevent development of resistant strains.

Dosage: The usual children's dosage schedule is as follows: 10-pound child, $\frac{1}{2}$ teaspoonful every six hours; 20-pound child, 1 teaspoonful every six hours; 40-pounds (or more), 2 teaspoonfuls every six hours.

How supplied: 60 ml. bottles pineapple flavored.

Source: Eli Lilly.

PLAQUENIL SULFATE

Description: Plaquenil sulfate is 7-chloro-4-[4-(N-ethyl-N-b-hydroxyethylamino)-1-methylbutylamino] quinoline sulfate (hydroxychloroquine sulfate).

Indications: Plaquenil benefits a high percentage of patients with polymorphic light eruptions or lupus erythematosus, especially the chronic discoid type. The exact mode of action in controlling these diseases is unknown. The action of Plaquenil against malarial parasites and *Giardia lamblia* is similar to that of Aralen.

The drug is indicated in (1) lupus erythematosus: chronic discoid, localized edematous or subacute types; (2) polymorphic light eruptions; (3) malaria due to *Plasmodium falciparum* and *P. vivax*; (4) *G. lamblia* infection.

Dosage: Lupus erythematosus and polymorphic light eruption: Initially an average adult dose of 400 mg. once or twice daily. This may be continued for several weeks or months, depending upon the response of the patient. For prolonged maintenance therapy a smaller dose (200 to 400 mg. daily) will frequently suffice.

Malaria: In adults an initial dose of 800 mg., followed by 400 mg. in from six to eight hours and 400 mg. on each of two successive days (total 2 Gm.).

Smaller doses are recommended for children.

Giardiasis: 200 mg. three times daily for five days.

How supplied: Tablets of 200 mg., in bottles of 100.

Source: Winthrop Laboratories.

P R E S I D E N T ' S P A G E



Fellow Pharmacists:

I suppose everyone has heard the saying "Give a busy man a job to do, and he will get it done." I believe that could almost be dedicated to the druggists, especially in small towns. I often wonder where that next request for help will come from. This past month I have helped plan and execute Rotary Farmer's night, American Legion Farmer's night, Chamber of Commerce Santa Claus appearances and treats for the children, and still several days to go. But much as I complain, I wouldn't change one day of it.

This brings me to the point I wish to make this month. It is not only the local druggist who is called on for extra duty, but also the druggist's wife. She, likewise, must serve on numerous committees, conduct drives for funds, help out at the store, keep up the house, and listen to our tales of woe. So I for one am making a New Year's Resolution to give credit where credit is due and thank my wife for all her help.

Al Knutson
President

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VETERINARY MEDICINE—

(Continued from Page 31)

that pigs and poultry will drink fluids long after they stop eating if they are acutely ill. The drinking water type of medication should be recommended at first, then, especially if the animals are dehydrated.

In the past it was thought that under no circumstance could you use therapeutic levels of antibiotic in the feed of fully ruminating animals. The reason being that the antibiotic destroyed the bacteria necessary for proper digestion and vitamin synthesis. Recent work has shown that we should reconsider our theory in regard to this matter. In the next few months research will probably be finished on this problem and the published reports will be available.

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R_x PHARMACY

News

M. L. SCHWARTZ REAPPOINTED TO PHARMACY BOARD

A second term as a member of the South Dakota State Board of Pharmacy was handed **Milford L. Schwartz** of Huron. Governor Joe Foss reappointed Mr. Schwartz to the three-year term early in November. This will be his second term on the Board, having been originally appointed to the board in 1953.

Mr. Schwartz received his degree in pharmacy from South Dakota State College in 1940 and he owns and manages the Schwartz Pharmacy in Huron.

Other members of the Board of Pharmacy are **Harold N. Mills** of Rapid City and **Harold L. Tisher**, Yankton. Mr. Mills was elected president of the Board and has been a member since October 1951. Mr. Tisher has just completed 10 years of continuous service on the Board having been first appointed October 1, 1946 by Governor M. Q. Sharpe.

71st ANNUAL CONVENTION DATES SET

The executive committee of the South Dakota State Pharmaceutical Association set the dates of June 20-22,

1957 for the 71st annual convention to be held at Rapid City. The dates were recommended by the Rapid City Retail Druggists' Association.

Kendall T. Eer Nisse, manager of the Mills Super Drug Mart, Rapid City, was elected to serve as Local Secretary of the convention. In accepting the honor Mr. Eer Nisse said "We have a very fine local society, friendly and cooperative, and I feel we shall be able to offer an interesting convention."

Tentative plans have set the closed business sessions on Saturday with the convention ending Saturday night with the Annual Association Banquet and Dance.

PHARMACY LICENTIATE EXAMS JUNE 4-6

Following the custom of previous years, the South Dakota State Board of Pharmacy has scheduled licentiate examinations on the three days immediately following graduation exercises for pharmacy students. Graduation and awarding of the Bachelor of Science degrees in Pharmacy is scheduled for June 3, 1957 and the examinations will take place June 4, 5 and 6, 1957.

The Division of Pharmacy has one of the largest senior

classes in the history of the college. More than 50 students will be candidates for the baccalaureate next year.

In announcing plans for the 1957 examinations, **Bliss C. Wilson**, Secretary of the Board, said that plans have been made to offer special examinations in Practical Pharmacy — Laboratory and Oral January 10, 1957. "It appears that there is still a definite shortage of college trained personnel in the pharmacies of our state," Wilson said. He added that "Pharmacy owners and managers who are interested in the employment of such personnel should contact the Dean of Pharmacy at South Dakota State College for the names of senior students who have not, as yet, accepted positions."

STATUS OF PHARMACISTS COMMITTEE MEETS

The Committee on Status of Pharmacists in Government Service; composed of delegates from the American Association of Colleges of Pharmacy, the American Pharmaceutical Association, the National Association of Boards of Pharmacy and the National Association of Retail Druggists; met in Washington, D. C., recently to de-

termine Committee organization and policy, to consider the Resolutions adopted by constituent organizations and to plan a program for future Committee actions.

The Steering Committee was given the specific assignments of continuing Pharmacy's efforts to gain professional recognition in the Armed Services, to gain expanded activity and opportunity in the Medical Service Corps, to obtain 'star' or 'flag' rank positions to which pharmacists could aspire, to assist in the inter-service transfer of pharmacists and relieve the necessity of 'specialist-training' courses in Pharmacy as being given by the Air Force and Navy, and to press for proper utilization of pharmacists drafted into the Armed Services, through liaison with the concerned Government departments. The Steering Committee was instructed to ascertain whether legislative action was needed and appropriate to accomplish these objectives.

A special sub-committee will undertake a survey of the pharmacists drafted into the Armed Services to determine the appropriateness of their military assignments and to attempt to reconcile the results of the survey with the official reports of the military establishment.

The American Association of Colleges of Pharmacy members will prepare an informational program, directed toward the students of Pharmacy, which will set forth the career advantages and opportunities of Government service and which will also present the ways in

which Selective Service obligations may be met by those not seeking a Government career. This informational program should prevent many of the mis-understandings by and disappointments of students who face Selective Service call, and assist the planning of those who may seek a career in Government Pharmacy.

The Committee formalized its objectives which are as follows:

1. To insure to the citizens that the pharmaceutical services provided by the Government, in either its civil or military components, meet the same exacting standards of professional competence and performance as are required by the laws of the several States; and to assist the Surgeons General of the uniformed services and the responsible officials of the civilian services in providing the best pharmaceutical service.
2. To promote or expand the areas of service in the civil and military components of Government wherein the pharmacist may contribute the benefits of his professional education, training and background; and to obtain for the pharmacist in Government service the maximum opportunities and advantages commensurate with his education, training and ability.
3. To assure the maximum, effective utilization of the professional education, training and background of pharmacists in Government service; and to sponsor, promote and support legislation to effect this utilization, where and when necessary.

4. To interest the students of Pharmacy in a career in the Government civil and military services where their education, training and background may be fully utilized; and to assure a steady flow of graduate, registered pharmacists into the Government service.

5. To sponsor and promote a system of information and education to the students of Pharmacy as to their legal obligations for military service and as to the various ways in which these obligations may be satisfied.

6. To assist the responsible Government officials in maintaining the proper balance between the requirements of the uniformed services and the civilian health and welfare requirements for trained and competent pharmacists.

7. To co-ordinate and implement the Resolutions (concerned with pharmacists and Pharmacy in Government service) adopted by the Committee's constituent organizations so as to insure uniformity and continuity of action for and by the profession of Pharmacy.

PHARMASCOOPS

Harry Poletes, who has been employed as a pharmacist at the Dow Drug Co. for the past two years, received his call to report for military duty December 5.

Vic Wettergreen of Bridge-water is recuperating after a major operation at Sioux Valley Hospital in Sioux Falls. Vic is retired and his son Harris is now managing the Wettergreen Pharmacy.

Mildred Jaratt, Colman, and her husband have moved

to Ventura, California. Mr. Jarratt has entered the jewelry business and Mrs. Jarratt will either teach or practice pharmacy there. **Art Jaratt** is now running the store at Colman.

Bob Deal has purchased the Hofer's Pharmacy at New Underwood. The business is now known as the New Underwood Drug. Bob had been employed by Becker's Drug in Rapid City.

Glenn Velau, Inspector for the South Dakota State Board of Pharmacy and his wife Esther spent the Holiday Season in San Diego and Long Beach, California. Glenn had a "bird's eye view" of the Tournament of Roses parade.

ANTIBIOTIC ADVANCES HAILED IN CAPITOL

The world of antibiotics has reached its thirteenth birthday without time to celebrate, according to speakers at the Fourth Annual Symposium on Antibiotics, recently concluded in Washington, D. C.

Few industries in America can point to such phenomenal growth as the field of antibiotics. In 1943, the first year of commercial production of antibiotics, 29 pounds of penicillin were produced as a crude, brown to yellow powder; now, elegant, neat crystalline antibiotics are being produced at the fabulous rate of 1,572,000 pounds (1955) yearly. The dollar expansion of the industry in the United States has been equally impressive. During the past 13 years, the dollar value of antibiotics products has risen from zero to \$300 million.

Combinations Now Used

These production and dollar value figures make it evident that rare indeed is the man, woman or child who has not been treated with an antibiotic at some time. This gigantic antibiotic use, which has saved the lives of countless thousands of persons and has affected the lives of millions of others, has provoked a reaction from microbes being attacked and killed by these new drugs. Some "bugs" are developing resistance to some of the antibiotics.

Major attention at the Fourth Annual Symposium on Antibiotics was devoted to a discussion of combined antibiotic therapy. Several antibiotic combinations were discussed, most of them with a special activity against the resistant staphylococci.

Speakers declared that tuberculosis today is rarely treated with a single antibiotic. Even virgin cases, it was explained, are treated with combinations of anti-tuberculosis drugs and in some cases a combination of three drugs may be chosen for treatment. One of the serious problems facing antibiotic therapy, the conference was told, is the presence, particularly in hospitals, of resistant microorganisms. A panel discussion showed considerable progress being made in solving this problem.

It was apparent from the variety of combinations of antibiotics reported on that there is a distinct, dynamic trend toward combined therapy. Experts anticipate that the winter months will show even greater expansion in this field and physicians are

expected to tend toward chemotherapy using combinations of drugs to direct a calculated modern and scientific cross-fire upon the microbial enemy.

Food Preservation Discussed

Practically an entire day of the conference was given over to a discussion of the use of antibiotics as food preservatives, a problem of tremendous interest to the nation. The latest information was presented on the use of these drugs in maintaining the freshness of poultry, fish, beef, ham and vegetables. A panel discussion that followed the long series of papers went deeply into all aspects of food preservation with antibiotics. These included the mode of action of these drugs in preservation of food, the germs responsible for spoilage and the effects on them of antibiotics, the limitations of antibiotic preservation of foods, and the medical and public health aspects of this problem. With intensive research being carried on in this field, conference speakers said that "important new chapters are being written for the book of knowledge on antibiotics."

Eight new antibiotics were described at the Symposium but the "older" antibiotics also received special attention. Further studies on penicillin were the subject of several presentations.

The Fourth Annual Symposium on Antibiotics was sponsored by the Division of Antibiotics of the Food & Drug Administration and by two antibiotic journals **Antibiotics and Chemotherapy** and **Antibiotic Medicine and Clinical Therapy**.



EOSINOPHILIC LEUKEMOID REACTION DUE TO DRUG SENSITIVITY

A Case Report

Robert F. Thompson, M.D.

Department of Internal Medicine

Yankton Clinic

Yankton, S. Dakota

Reported herein is a patient who developed an erythematous-vesicular (exfoliating) dermatitis and a marked eosinophilic leukemoid reaction shortly after receiving penicillin and a sulfonamide (probably sulfadiazine) for a "throat infection." Certain aspects of the illness suggested that infectious mononucleosis was the underlying condition responsible for the "throat infection." ACTHAR (aqueous) intramuscularly produced immediate and beneficial response, and the patient was completely asymptomatic four years later (May 1955).

Case Report

History:

D. B., #123725, a seventeen year old white boy, entered St. Joseph Mercy Hospital, Ann Arbor, Michigan, on 3 April 1951.

A severe sore throat, fever, difficulty swallowing, sore tongue and mouth, and red spots on the tongue developed fourteen days before hospitalization. Two days later his physician prescribed five intramuscular penicillin injections over seven days and "sulfa tablets" (Sulfadiazine?) for four days. A generalized pruritic vesicular skin rash erupted eleven days before hospitalization (twenty-four to thirty-six hours after starting penicillin therapy), which failed to respond to antihistaminic drugs. The eruption affected principally the face and hands and progressed in severity. Swallowing solid foods and liquids caused oropharyngeal pain. Additional ther-

apy included about twelve yellow capsules (Aureomycin?) for two or three days prior to hospitalization. Progressive malaise and weakness, and possible weight loss occurred. Previous penicillin or sulfonamide administration were not known. There had been no joint symptoms or urticaria.

Epigastric discomfort for five days, not associated with ingestion of food, nausea, vomiting, nor diarrhea, occurred two weeks prior to the onset of the present illness. His physician prescribed a "thick white mint flavored" liquid and tincture of paregoric; symptoms disappeared in a few days. Hay fever, asthma, eczema, or allergic reactions had never occurred in the past. Recurrent "eczema" of an unknown nature plagued one sister for years. "Shingles" (herpes zoster) possibly occurred on the right side of the neck one year previously with five to six days of pruritis but no pain. A facial eruption diagnosed as acne vulgaris recurred during the previous two to three years. No operation, illnesses, or other abnormalities had occurred in the past.

Physical Examination:

On admission he appeared acutely ill, uncomfortable, with slow and halting speech. A blood pressure of 115/68 and normal temperature, pulse, and respiratory rate were recorded. A maculopapular vesiculo-squamous weeping eruption, principally on the face, scalp, hands, arms, and legs was present. The

skin of the arms was inelastic, with areas of lichenification. Small irregular slightly elevated white-yellow lesions surrounded by smooth red edematous mucosa covered the orobuccal mucus membrane. Discomfort in his mouth caused difficulty swallowing and prevented inspection of the pharynx and tonsils. (At a later date the tonsils appeared cryptic but normal.) Initially, lymphadenopathy was absent, although three days later tender, discrete posterior cervical, axillary, and inguinal nodes appeared. The remainder of the examination failed to reveal any abnormalities; the liver and spleen being neither tender nor palpable.

Laboratory Examinations:

4.65 million erythrocytes, 12.1 gm. % hemoglobin, 27,500 leucocytes (58% neutrophils, 21% eosinophiles, 1% basophiles, 14% lymphocytes, 4% monocytes). Urine specimens: negative for albumin, sugar, acetone, and negative microscopic examination of the sediment. NPN 37 mgm. %. Erythrocyte sedimentation rate 21 mm./hour (normal less than 10 mm./hour for males). Total serum proteins 5.8 gms. % (albumin 3.06 gms. %, globulin 2.74 gms. %). Cephalin-cholesterol flocculation three plus in forty-eight hours. Stool specimens negative for enteric parasites. Heterophilic sheep cell agglutinins as shown in Table I.

TABLE 1

HETEROPHIL SHEEP CELL AGGLUTINATION

DATE	TITER OF UNABSORBED SERUM	TITER AFTER ABSORPTION	
		GUINEA PIG KIDNEY	BOILED BEEF ERYTHROCYTES
APRIL 10, '51	1:224	1:64	no test done
22, '51	1:224	1:64	no test done
May 9, '51	no test done	1:112	no agglutination
14, '51	1:224	1:56	no agglutination
August 13, '51	1:14	no test	no test

Hospital Course:

Temperature varied with afternoon peaks of 102 degrees F. orally. Parenteral fluids were necessary because of his inability to swallow. The dermatitis and stomatitis responded slightly to saline wet dressings, starch sponge baths, plain calamine liniment, Benadryl 200 mgm./day orally, and hydrogen peroxide mouth washes. He continued weak, lethargic, and unable to eat.

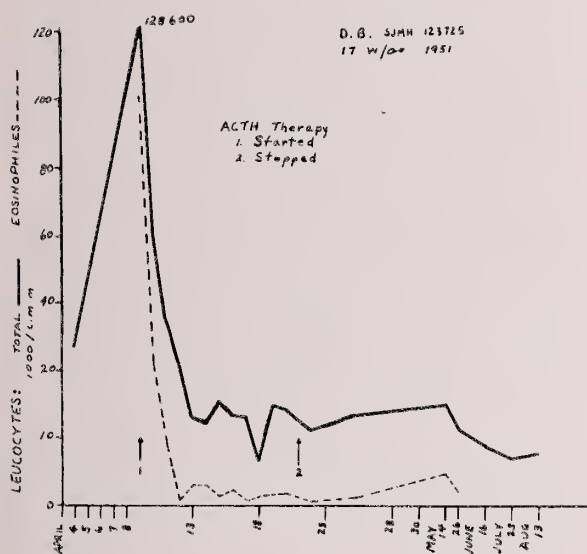
On the third day (7 April 1951) 84,000 leucocytes with 79% mature eosinophiles and 12% lymphocytes (many of which were large and similar to the type seen in infectious mononucleosis) were noted. Studies on the fifth day of hospitalization revealed 5.03 million erythrocytes, 14.2 gms. % hemoglobin, 128,600 leucocytes (75% eosinophiles and 17% large atypical lymphocytes). There were 102,000 eosinophiles per cubic millimeter of blood as determined by the phloxine-methylene blue-propylene glycol method of Randolph.¹ Biopsy of striated muscle, lymph node, and sternal aspiration were performed on this day.

Histological study of the sections of muscle (pectoralis major) were normal and lacked any evidence of periarteritis nodosa or trichinosis. The lymph node sections (axillary) revealed marked reticuloendothelial hyperplasia with loss of the follicular architecture in some areas; eosinophiles filled some of the blood vessels; the lymph node capsule was intact. Although the findings suggested lymphoblastoma with leukemia in some respects, other possibilities included infectious mononucleosis, lymphadenopathy associated with a generalized dermatosis, and allergic eosinophilic leukemoid reaction.²

Sternal marrow aspiration, performed on the same day, demonstrated an absolute increase in eosinophilic myelocytes, metamyelocytes, and segmented eosinophiles, a slight increase in the number of mature lymphocytes, and normal erythrocytic and megakaryocytic elements. This picture was more compatible with an eosinophilic leukemoid reaction than leukemia.²

Assuming that he demonstrated an allergic eosinophilic leukemoid reaction with possible infectious mononucleosis, therapy with intramuscular ACTH (Armours ACTHAR) was begun the evening of 9 April 1951. He received 100 mgms. I.M. that night and subse-

quent decreasing doses at four hour intervals initially, then six and eight hour intervals. The total amount of ACTH given was 465 mgms. in divided intramuscular doses over a twelve day period. An immediate response occurred with rapid fall in circulating eosinophiles, improved ability to eat and swallow within twenty-four hours, marked improvement in pruritis in a few hours, and in the dermatitis in forty-eight to seventy-two hours. No fever occurred twenty-four hours after the first injection of ACTH. (Fig. I shows the changes in the blood picture after ACTH was administered.)



tinins not unlike those after horse serum injection; in other words, absorbable on guinea pig kidney extracts. (3c) One wonders if penicillin might not stimulate the same type of antibody (agglutinin) formation, especially under conditions where penicillin produces an allergic reaction or serum sickness syndrome. Such a mechanism may explain a portion of the sheep cell heterophilic agglutinins found in this patient.

The mild lymphadenopathy, lymphocytosis with cells of the so-called Downey-type, and initial sore throat with fever correlated with the sheep cell heterophilic agglutinin not absorbed by guinea pig kidney but completely absorbed by beef erythrocytes certainly suggests the presence of infectious mononucleosis. (3d, e, f).

Evidence indicates that antibody titers in animals are temporarily increased following administration of ACTH or Cortisone. It is thought that this is due to lysis of lymphoid tissue and release of antibody containing gamma globulins from these cells. (4a, b, c). The first sheep cell heterophile agglutination test was done on serum collected 12 hours after the first injection of ACTH, and one wonders if the titer may not be elevated for that reason. However, almost 30 days later, a period of time sufficient for the ACTH stimulation to have no effect, the sheep cell heterophilic agglutinin titer was still at a significant level.

"Eosinophilia" occurs when more than 6% of the total circulating leucocytes are eosinophilic polymorphonuclear cells (5a, b); in other words, 300 to 600 eosinophiles per cmm. in a person with a normal leucocyte count of 5,000 to 10,000 per cmm. There is a long list of conditions in which eosinophilia has been noted: (5a, b, c, d, e, f, g, h, i, j).

- 1) Allergic diseases of all types
- 2) Skin diseases
- 3) Parasitic infestation
- 4) Malignant tumors (especially when metastatic) and lymphoblastoma (including blood dyscrasia)
- 5) Miscellaneous disease states.

(The reader is referred to the literature for more detailed descriptions of these conditions.)

In the case reported eosinophilic myelogenous leukemia was seriously considered. The long term follow up and the other fea-

tures noted cast serious doubt on such a diagnosis. The highest reported total eosinophile counts in the literature have occurred in chronic myelogenous leukemia (50% plus of total leucocyte counts over 100,000) (5a), essential eosinophilia (56% of 39,000 WBC) (5c), "dermatosis" (63% of 40,000 WBC) (5d, e), and metastatic carcinoma of bronchogenic or unknown primary origin (10% - 74% of leucocyte counts varying from 7,500 to 140,000) (5b).

The eosinophilia in the patient reported was most likely due to allergic reaction to penicillin or sulfadiazine, or both. It is not our purpose to review the types of allergic reactions produced by penicillin or sulfonamides: this has been done rather completely by others. (6a, b, c, d, e). The rapid onset of the erythematous-vesicular dermatosis within twenty-four to forty-eight hours after the initial dose of penicillin, since no previous penicillin or sulfonamide had ever been taken by the patient, suggests allergy to penicillin rather than sulfonamide. It has been suggested by others that cross allergic reactions occur between *Tricophyton* dermatophytosis and penicillin (which after all is a product of another fungus) (6a); and assuming that 50% or more of individuals have or have had such a dermatophytosis, it is not unreasonable to assume a primary allergy to penicillin as likely. Toxic reactions to sulfonamides usually do not occur prior to the fifth day of therapy unless the patient had sulfonamides previously with or without a reaction. (7a, b, c, d, e).

The type of penicillin used was probably of the "depot" type intramuscularly. The slow release of the penicillin perpetuated the allergic reaction for five or more days after the last dose. Skin tests for sensitivity to penicillin after recovery were not done. Others have reported severe anaphylactoid or other reactions associated with trial doses of penicillin (as is suggested to determine sulfonamide sensitivity) (6b; 7a, b, c, d, e) and also with intracutaneous injection to determine sensitivity. A negative scratch or patch test does not rule out a penicillin sensitivity of high degree; these are more likely to be positive if the individual has had a contact dermatitis type of reaction (6b, c, d, e). On the other hand, a positive patch, scratch, or intracutaneous test is a valid indication of penicil-

lin sensitivity (6b, c, d, e). The early reporters of such testing had difficulty separating sensitivity to the impurities in the penicillin preparations and sensitivity to the crystalline penicillin per se (6a, b, c). Thus, some investigators believed that even in the face of a penicillin allergic reaction it was safe to continue administration of the drug, or resume therapy shortly after discontinuing the drug since the sensitivity was of brief duration, or switch to another commercial brand to obviate any possibility of a reaction (6c). This is not true today with our crystalline penicillin preparations. There is further evidence that more people are becoming allergic to penicillin over the years because of its widespread use; and the procaine-penicillin (depot types) are associated with a high incidence of allergic responses (6b). Various hypotheses are available to explain this latter factor. (6b, c, d, e)

Skin eruptions of several different types have been reported in infectious mononucleosis, but the descriptions have not resembled the type seen in this patient. (3e, f) Mild degrees of eosinophilia occur in infectious mononucleosis but not of the severity and duration noted in this patient. (3e, f)

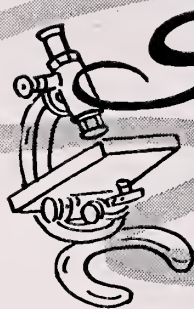
The literature is replete with accounts of beneficial results following the use of ACTH or Cortisone in allergic conditions not responding to other measures. (8a, b, d, e, f) Of the three forms of administration of ACTH now available (intravenous or intramuscular aqueous, or intramuscular gelatin preparations) intramuscular (aqueous) seemed the best when the patient was observed in 1951. Whether oral Cortisone or intramuscular Cortisone would have been of more value than the ACTH is conjectural. We felt that, if the patient responded to ACTH, it would be the safer of the two medications.

SUMMARY

A patient is reported who developed erythematous-vesicular (exfoliating) dermatitis and eosinophilic leukemoid reaction within twenty-four to thirty-six hours after the first dose of intramuscular depot penicillin and oral sulfonamides. Evidence presented seemed to indicate the patient initially suffered from infectious mononucleosis associated with a sore throat. Differentiation of the three types of sheep erythrocyte agglutinins are discussed. The beneficial and immediate response of all aspects of the illness to ACTH intramuscularly are noteworthy. The patient continues healthy after four years.

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Scientific

PAPER

LARYNGEAL AND TRACHEAL EMERGENCIES IN THE NEWBORN AND YOUNG INFANT*

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Los Angeles, California

Obstruction of the air-way in the newborn or very young infant presents a real emergency which requires immediate accurate diagnosis in order to institute life-saving measures. Making such a diagnosis quickly can be very difficult in these tiny patients. Vocal cord pathology and the aspiration into and obstruction of bronchi by foreign material are the two causes most frequently thought of, but many other conditions may result in impaired breathing. Our experiences in a very large children's hospital have lead us to consider the following differential diagnosis in attempting to make a decision as to etiology and treatment. For the sake of organization, laryngeal and supra-glottic conditions will be considered first and then tracheo-bronchial, and mediastinal conditions will be discussed.

TRAUMA: At birth the aspirating catheter used in the delivery room may cause enough swelling, or hemotoma, of the glottic structures to result in narrowing of the lumen or in restriction of movement of the arytenoids. Stridor, retraction and hoarseness of cry are usually only moderate in degree. The diagnosis is established by direct laryngoscopy. Unless there is very great narrowing of the glottic air-way only conservative treatment is necessary.

PARALYSIS: Vocal cord paralysis may result from intracranial damage or pathologic conditions present at birth. This diagnosis should be thought of if the dyspnoea, stridor,

retractions and varying degrees of cyanosis were present immediately at birth and if the **cry** was very **weak**. These findings will be quite moderate if only one vocal cord is involved, but bilateral abductor laryngeal paralysis has occurred at birth and can be fatal in a short time if not diagnosed by direct laryngoscopy. If the paralysis is unilateral it may be treated conservatively, only using oxygen as needed, as most of these clear up in a few days. Bilateral paralysis, however, usually demands immediate tracheotomy, as these infants will remain cyanotic even in oxygen.

TUMORS: While tumors of the larynx are quite rare at birth, several have been observed. Cysts and hemangiomas have been the most frequent in the newborn while granulomas and rarities as aberrant thyroid and benign and malignant tumors have been encountered in older infants. With laryngeal tumors the symptoms are again usually present immediately at birth, but the cry is hoarse and the stridor greater on inspiration than expiration. The retractions are greatest in the suprasternal notch, thus indicative of a laryngeal level, and the infant's cyanosis does not improve greatly with oxygen. Diagnosis can accurately be made only by direct laryngoscopy. There must be some type of newborn laryngoscope in every delivery room. This examination of the laryngeal lumen will determine the need for immediate tracheotomy. Small tumors can be bitten away with laryngeal forceps or snares. Cysts may be aspirated and their walls removed. Hemangiomas may be aspirated and sclerosed and

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x-ray irradiation considered. Large tumors may have to be removed by external approach after the child is about six months of age.

GLOSSOPTOSIS: The Pierre-Robin syndrome of : (A) Glossoptosis, (B) Micrognathia, and (C) cleft palate is being recognized more and more often as the cause of great respiratory obstruction because of the falling back of the tongue into the hypopharynx at or soon after birth. Swallowing is very difficult and early feedings often result in aspiration causing pneumonitis and atelectasis further complicating the dyspnoea. The diagnosis is made by observing a greatly receding chin (hypoplasia of the mandible), a falling backwards of the tongue and the presence sometimes of a cleft-palate. Pulling out the tongue, holding forward the mandible, or lifting forward the base of the tongue with the tip of the laryngoscope in the valleculae, relieves the respiratory obstruction and substantiates the diagnosis.

In most instances these infants will do well if the tongue can be kept forward for four or five days. But in the most severe cases re-occurring dyspnoea and cyanosis, aspiration pneumonitis, and atelectasis have occurred for several weeks to two or three months. As treatment one can first try simple elevation forward of the base of the tongue with an infant's rubber or plastic anesthesia air-way. If this gives relief the air-way can then be taped in place with adhesive tape from its flanges to the lips and cheeks. The infant must be fed by gavage with an intranasal feeding tube. The tongue can also be held forward by sutures through its tip; by using any type of traction; or by taping sutures to the chin or by tying them to arch bars. But such sutures will probably pull through after a few days. Skeletal traction by plates and wires through or around the mandible can be used with pulley traction. Suturing of the tip and undersurface of the tongue and floor of mouth to the inner surface of the lower lip can also be used.

LARYNGO-MALACCIA: The symptoms of absent, incomplete, soft weak laryngeal cartilages are not usually noticed immediately at birth but appear a few days after birth and may increase the first few weeks of life. There is usually a very loud harsh inspiratory stridor and some retractions which

are accentuated by crying and by lying on the back. Early feedings are difficult and often are accompanied by choking, coughing and regurgitation. Changes in position such as turning upon the stomach may relieve them. With this condition the cry is not hoarse; there is rarely any cyanosis, and expirations are normal and unhindered. Direct laryngoscopy reveals a flaccid, tightly rolled-up epiglottis which may also be short and stubby. On inspiration it is drawn down onto or between the vocal cords. In addition one arytenoid may be rolled-over into the glottis.

Amputation or sutures through the epiglottis are not indicated. Tracheotomy is rarely necessary. One should just determine the position in which breathing and feeding is best and so advise the parents. The cartilages are usually normal in size and rigidity after nine months of age.

ATRESIA OF POSTERIOR CHOANAE: Rare cases of cyanosis and dyspnoea at birth have been observed due to a congenital atresia of both nostrils posteriorly and the failure of the newborn infant to open his mouth for breathing. The diagnosis is suspected when there seems to be no nasal breathing and when there is an indrawing of the lips on inspiration and a blowing out of the lips on expiration. With this condition there is very great difficulty in nursing or feeding. The diagnosis is established by probing the nasal passages, usually with a rubber catheter, and by roentgenograms with lipiodol placed in the nasal cavities.

Surgical removal of the bony or membranous obstruction is necessary. Abscesses and hematomas of the nasal septum and floor of the nose and upper lip have caused the same clinical picture.

WEBS: There may be congenital laryngeal webs of either the anterior or posterior commissure. These rarely present an acute emergency. Stridor and a hoarse cry are moderate. These are best treated by mechanical dilation with bronchoscopes or metal laryngeal dilators.

RETROPHARYNGEAL ABSCESS: These usually occur in older infants but compression on the larynx and trachea from posteriorly can necessitate tracheotomy. The diagnosis is suspected when the voice is muffled, rather than hoarse, and when there is dysphagia in addition to dyspnoea. Treatment is incision and drainage.

TRACHEO-BRONCHIAL

A consideration of tracheo-bronchial pathology that may be causing severe obstruction to breathing amounts to a differential diagnosis of so-called "atelectasis of the newborn." True "atelectasis of the newborn" is supposedly due to mucous plugging a large bronchus or to the aspiration of fluids during birth or the first feedings after birth. Rarely have I convinced myself at the time of bronchoscopy that this has happened and rarely have I demonstrated mucous actually plugging the suspected large bronchi. However, many of these patients have quickly improved and their lungs completely cleared following bronchoscopy. Typically, I believe such cases should exhibit cyanosis out of oxygen and retractions below the laryngeal level. The retractions are usually xiphoid, intercostal and subcostal. There is no hoarseness and no stridor. There is usually a history that the infant seemed to breathe all right at birth but later developed cyanosis out of oxygen. Auscultation should reveal wet diminished breath sounds over the lobe involved. X-rays should demonstrate lobar atelectasis rather than scattered bilateral density. Many other conditions have been confused with and misdiagnosed as atelectasis, as:

PNEUMOTHORAX: Dyspnoea is usually present immediately at birth. The diagnosis must be made by x-ray. Bronchoscopy is contraindicated.

CARDIOVASCULAR DEFECTS: Dyspnoea and cyanosis accompany many of these congenital defects. As a distinguishing feature the cyanosis does not clear with oxygen. Dextracardia, transposition of great vessels, septal defects, etc. are examples.

DIAPHRAGMATIC HERNIA: Frequently the herniation of the stomach into the chest cavity causes enough compression of the left lung in young infants so that dyspnoea is present. X-rays demonstrate atelectasis of the compressed lung but the outline of the air-filled stomach above the diaphragm should suggest the diagnosis. Passage of a rubber catheter or lipiodol down the esophagus into the stomach for x-ray examination will substantiate the diagnosis.

AGENESIS AND HYPOPLASIA OF THE LUNGS: These congenital anomalies often cause dyspnoea, cyanosis and even noisy

breathing that can be confused with laryngeal obstruction. The diagnosis is usually made by roentgenography. There is a much greater shift of the mediastinal structures to the side of the anomaly and much greater density of this lung area than in atelectasis due to bronchial obstruction. Lipiodol placed into the esophagus will demonstrate its malposition in the side of the chest of the agenesis. Usually there also are anomalies of ribs and thoracic vertebrae.

BRONCHIOLITIS: The dyspnoea, cyanosis and abdominal and intercostal retractions of this disease in tiny infants has been confused with laryngeal and tracheal obstruction. But, the absence of hoarseness, stridor and supra-and infra-clavicular retractions rule out this diagnosis and the need for tracheotomy and bronchoscopy.

HYALIN MEMBRANE: The persistence of this membrane in the newborn infant can give a picture that is difficult to distinguish from that of atelectasis in the newborn or congenital non-expansion. It should be considered when bronchoscopies have failed to reveal bronchial obstruction.

FIBROCYSTIC DISEASE: This condition in older infants sometimes gives a clinical picture resembling obstruction to breathing. The x-ray examination usually demonstrates cysts.

MEDIASTINAL

Mediastinal pathology by compressing or constricting the trachea can cause obstructed breathing that is erroneously considered to be of the laryngeal level. However, it usually has a distinguishing feature, that is, **expiratory** stridor. At this level there is usually also compression of the esophagus so that there is dysphagia as well as dyspnoea. Therefore, much can be learned by x-ray examination of the esophagus, using an opaque media, as well as x-ray examination of the lungs.

CYSTS AND TUMORS: Mediastinal cysts and tumors are not rare in tiny infants and their presence can cause air-trapping and atelectasis. Noisy breathing on expiration is suggestive. There may be dysphagia to the point of regurgitation and aspiration pneumonitis. X-ray examination of the esophagus with lipiodol will demonstrate a smooth, rounded external compression between it and the trachea.


VASCULAR RING: Vascular anomalies such as double aortic arches also can compress the trachea and cause dyspnoea requiring emergency relief.

ESOPHAGEAL ANOMALIES: A large variety of congenital esophageal abnormalities such as tracheo-esophageal fistulas and atresias, congenital strictures, congenitally short esophagus, cardiospasm, chalasia, relaxed or flaccid crico-pharyngeal muscle, dysfunctions and neuropathies of the esophagus can all simulate the clinical picture of laryngeal or tracheo-bronchial obstruction because of aspiration of esophageal or gastric contents causing a pneumonitis and atelectasis.

In summary, it is recognized that many conditions other than atelectasis of the newborn and laryngeal obstruction must be considered in the very small infant presenting respiratory distress that requires emergency treatment. The presence or absence of hoarseness, the character of the stridor (inspiratory or expiratory), the location of the retractions, the effect of oxygen upon the cyanosis, are all signs that point to the correct diagnosis. The use of the direct laryngoscope and esophageal roentgenography with an opaque medium are invaluable.

CLASSIFIED AD

Veterans Administration Center, Sioux Falls, South Dakota, will in the near future have a vacancy for a full time Medical Officer to serve as a Medical Rating Specialist. Forty hour week, 8:00 A.M. to 4:30 P.M. Monday through Friday, with salary \$8,645 per annum. Vacation, sick leave and retirement benefits are provided. This position offers a fine opportunity to a Practitioner unwilling to retire but ready to slow down. If interested, call or write Manager, V. A. Center, Sioux Falls, South Dakota.




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**P. H. Woutat, M.D.
Grand Forks, North Dakota**

As we reflect on the many and varied problems and changes that have confronted organized medicine and individual practitioners during the past twenty-five years, and the rapidity with which new ones arise, we can but speculate on what future developments we might anticipate and what our part in them will be.

We have all observed revolutions in agricultural methods, manufacturing, marketing and merchandising, transportation, and actually in the whole socio-economic structure of this country and the world. Medicine has been and will continue to be no exception. As in business and industry, many of the changes in medicine have been developmental advances of our own doing. Also, as in business and industry, many have been government inspired, often with our active opposition and misgivings.

The passage of legislation providing for cash payments to disabled Social Security participants at age 50 was a severe defeat not only to organized medicine but also to other moderate and cautious groups who actively opposed it. These other groups are said to include the Social Security administrators themselves, as well as higher government officials. One can only wonder what influenced the passage of such legislation over what appeared to be such strong opposition. Do the members of the Congress feel that the thinking of the majority of the people of the country is along such lines, or did the approach of the recent election exert this great influence?

After the decision that the care of the dependents of military personnel is a direct governmental responsibility, the legislation allowing such care by private physicians and hospitals of the patient's choosing may, in some respects, be considered as a victory for organized medicine. We must remember, however, that this arrangement offers complete medical and hospital care at government expense and under government con-

trol to large numbers of our younger population at a formative period in their lives. Many of them may get used to the idea and come to like it.

In time this program will provide considerable data as to costs, methods of operation, use and abuse, and information regarding administrative problems of such programs. If successful, and not too expensive, it can give valuable ammunition to the advocates of such a program on a nation-wide basis.

Legislative action expanding the base of compulsory inclusion under the Social Security program has left us almost the only group not yet included, and how long we can remain out is doubtful. Thus, under what is professed to be a "middle of the road" administration, by current standards, we have taken further significant steps along the socialistic path.

Thus far, for the most part, we have been able to maintain the right of the patient to select his own physician. We have lost much ground, however, in our efforts to keep third parties out of the physician-patient relationship. Governmental agencies, insurance companies, Blue Shield and Blue Cross all are intervening more and more in our financial, and, at times, in our professional relationship with our patients. Thus the bond becomes weakened, and the step toward the completely impersonal third party becomes shortened.

Some of our friends, including many devout Republicans among them, think that we are foolish to fight what they term "the trend." Be that as it may, we are obligated to oppose what we consider unsound and dangerous proposals in our own field and attempt to guide coming changes along what we consider to be sound principles. In doing so we will continue to find ourselves engaged in activities in which most of us are unschooled, and which we certainly did not anticipate at the time of our enrollment in Medical School. Success in such undertakings demands that we acquire and maintain such stature as a profession and as individuals that our views

* Presented to the North Central Medical Conference, St. Paul, Minnesota, November 10, 1956.

can be expressed in many places and will be given serious consideration.

To aid us in doing this, many things have been urged upon us. In fact, we now have a new problem about which speeches are not made nor papers written. Not long ago in the Journal of Medical Education in an article on the selection of medical students, there appeared a satirical definition of the ideal medical student. The requirements are amusing and certainly do not fit any medical students I have known. However, it led me to reflect on the probable modern requirements for the ideal physician.

He must, of course, be of fine and scholarly appearance, with great intellectual capacity, of faultless personal habits, and inspire the confidence of his patients and the respect of all others.

He must be active in community affairs, taking his full part in Chamber of Commerce and Service Club functions, serve on and advise Municipal and other governmental bodies as called upon, be active in local and state political affairs, be a good church worker and attend frequently.

He must be available on short notice for papers to local PTA and church groups, service and business girl's clubs, and all other groups and organizations interested in obtaining reliable information on medical subjects.

He must, of course, take an active part in the various youth programs of the community.

He must work on and contribute liberally and cheerfully to fund raising campaigns for new hospitals, YM and YWCA's, Old Peoples' Homes and Nursing Homes, give liberal support to the Church and Community Chest, and help defray the deficit of the local ball club.

He must be active in his local and State Medical Societies, attend meetings regularly, and accept officership and committee assignments eagerly, and perform his duties quickly and with great tact and diplomacy.

He must be faithful in attendance at hospital staff meetings, be ready to give carefully prepared scientific papers, serve on hospital committees cheerfully and efficiently, keep his hospital records complete in all details, and be prompt with carefully prepared lectures to the student nurses.

He must be a good family man with a

gracious and tactful wife who disdains mink coats and other vulgar extravagances, and must spend lots of time at home with his children.

But above all this, he must never fail to give his patients the finest possible medical service, keeping abreast of medical progress by reading, attendance at medical meetings, and taking frequent postgraduate courses. He must be a tireless worker and improve his public relations by spending adequate time with his patients, answering urgent calls promptly, day or night, and by not keeping his patients waiting. This must all most certainly be done for what has been vaguely defined as a reasonable fee.

This has been presented solely as some personal reflections and should probably be considered a poor presidential address because I have no solutions to propose for these or any of our other problems. In closing, however, I do have one word of advice, probably best expressed in the immortal words attributed to that great Frenchman, Maurice Chevalier, "at our age we must be reasonable."

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THE HISTORY OF THE SOUTH DAKOTA STATE MEDICAL ASSOCIATION

(Continued from January)

Clark J. Pahlas
Pierre, S. D.

About this same time (1914-1915) the American Medical Association suggested to the state associations a program for gathering new members. The A.M.A. agreed to send into each state an organizer, if for each new bona fide member solicited the state medical association would agree to pay \$1.00. This plan was accepted by the South Dakota Medical Association in 1915.³⁷

Medical Legislation

Another problem faced by the society was that of establishing sound medical legislation. As much as the State Medical Association wanted its professional opinion known to the legislators, it still wishes to remain an extra-legal society as far as politics were concerned. Toward this end in 1889 the association resolved that ". . . it is derogatory to the interests of this Society and it is against the objects for which this Society was organized to have any question of a political nature presented or discussed at any of its meetings."³⁸ Yet the need for suitable state medical laws and the desire for legislative recognition soon convinced the members that they must begin to take an active interest in medical jurisprudence.

Some of the problems and difficulties involved were indicated in the remarks of Dr. Warne in 1896:

Politics have destroyed the unanimity of the Society. The State Board of Health is a political machine. This Society to do anything with the Board must dabble in politics too long to accomplish a little. We

37. **South Dakota Medical Society.*** 1914-1919, Unpublished manuscript on file in the office of R. G. Mayer of Aberdeen, South Dakota. Taken from the Proceedings of the House of Delegates, 1915 annual session. There was no appreciable increase in association membership to indicate the success of this A.M.A. program in South Dakota.

*It should be noted that the title of this source does not bear the true name of the organization, owing to the fact that the word **association** was substituted for **society** in 1906. (See Appendix D of this thesis.) Inasmuch as this material for 1914-1919 is in scrapbook form, consisting in part of clippings from the **Journal Lancet**, it seems logical that the binding which bears the incorrect title of "Society" rather than "Association" was purchased prior to the 1906 amendment mentioned above.

38. **Dakota Medical Society Records**, 1882-1904, p. 70.

must leave out party lines and have a united action for [the] good of [the] Society. There is no use to do anything until we can formulate some plan whereby concerted action is secured.³⁹

This concerted action was slow in coming, but by 1899 the State Medical Association had set in motion the writing of a suitable state medical law. An attorney was to be hired for \$50.00 to attend to the matter and report the following year. The attorney, for some reason, was not employed, and the task of framing a medical law was resumed the following year at the association meeting. It was then decided that a Committee on Legislation would, with the aid of a lawyer, draw up a bill "to regulate the practice of medicine in South Dakota."⁴⁰ During the annual session of the association in 1900, discussion was held concerning this bill "most vital to the medical practice." Suggestions such as creating the ". . . State Board of Examiners to license physicians to practice, and that no graduates of medical colleges be recognized and license to practice be granted on examination only" were made.⁴¹ However, a lack of support in the legislature delayed action until 1902. During the winter of that year Dr. H. E. McNutt of Aberdeen worked diligently on behalf of the association and succeeded in pushing a medical bill through the legislature. This medical law that was "sorely needed" helped South Dakota ". . . keep pace with sister states in the regulation of medical practice."⁴²

This measure (House Bill 150) provided for the establishment of a Board of Medical Examiners, consisting of "seven skilled and

39. **Dakota Medical Society Records**, 1882-1904, p. 128. It is of interest to note that the same accusation of "political machine" or "political ring" is made by the State Board of Public Health concerning the State Medical Society. See page 23 of this thesis for the basis of this conflict.

40. **Ibid.**, p. 157.

41. **Loc. cit.**

42. **Dakota Medical Society Records**, 1882-1904, p. 173. See **Session Laws of South Dakota**, 1903, House Bill 150, "Establishing of a Board of Medical Examiners," Chap. 176, pp. 202-208.

capable physicians" appointed by the governor. The board was to "... consist of not more than four members from the school known as Regular, not more than two from the school known as Homeopath, and not more than one from the school known as Eclectic." In addition, House Bill 150 provided for the regulation of the practice of medicine, surgery, and obstetrics, provided for the licensing of physicians and surgeons and for penalties for violations of such regulations of the practice of medicine, surgery, and obstetrics.⁴³

At the annual meeting in 1903 a sum of \$300.00 per year was set aside by the State Medical Association to hire an attorney on behalf of the association to aid in the enforcement of the provisions of House Bill 150. At the same session it was proposed by the society that an attempt be made to have a bill formulated to provide for "registration laws" to secure "more accurate mortality statistics."⁴⁴

With this brief experience in politics the association realized the advantage that would be had if a paid representative of the society could be present during legislative sessions and act in the best interests of the medical profession. Such lobbying was deemed necessary, because "... not one man in five [legislators] really knew what bills relating to medicine were worthy, unless they were explained and their merits pointed out."⁴⁵

Therefore it was recommended in 1908 that the "... Association appoint itself guardian of Medical Legislation ... and that these matters be taken out of the hands of the politicians."⁴⁶ Accordingly, a committee of three was appointed to be present at Pierre during the next legislative session to represent the association's interests.

There was important medical legislation before the legislature in 1909, and it was hoped that the medical lobby would be able

to advance the interest of the association. The Legislative Committee, however, failed. The association, therefore, sought to exert a united effort when President Dr. S. A. Brown of Sioux Falls sent to all association members a letter of appeal asking for contributions to pay the expenses of a new representative to go to Pierre. In response to this letter the members of the association contributed \$112.50.⁴⁶

The actual bill before the legislature in 1909, the Mertens Bill, proposed to increase the State Medical Association's power on the State Board of Health by enabling it to select association members to the board and by increasing the state appropriations to the State Board of Health. Furthermore, the bill involved the power of the Board of Health to hold examinations necessary to check epidemics. It was the failure of the legislature to enact this section of the bill which raised the wrath of the Board of Health to such pitch that it declared publicly that the "Legislature alone would be responsible for the deaths that might result from epidemics of disease that were liable to sweep the state."⁴⁷

In like manner, the State Medical Association's Committee on Legislation voiced its opinion of the legislature in failing to pass this bill of 1909. Dr. J. G. Parsons of Sioux Falls, speaking for the medical society, stated that the association would conduct an "aggressive campaign" to insure that the sections of this bill providing for the registration of morbidity and mortality statistics be enacted. Dr. Parsons went on to accuse the members of the state legislature of complacency, and he promised that the results of their negligence would be echoed back to them by the association.⁴⁸

In conjunction with this bill of 1909 was the proposed creation of a State Laboratory to be administered by the State Board of Health. The cities of Vermillion (backed by the State University Medical School) and Pierre wanted the laboratory. The laboratory was agreed upon, and a bill was passed locating it at Vermillion.

With the defeat of the major portions of the

43. *Session Laws of South Dakota* (1903), Chap. 176, p. 202.

44. *Dakota Medical Society Records, 1882-1904*, p. 173. It was difficult for the doctors of the state to know which diseases were in epidemic and which were causing the greatest mortality.

45. *South Dakota State Medical Association, 1904-1914. Report of Public Policy and Legislative Committee, 1908.*

46. With but one exception there were no contributions received from members west of the Missouri River.

47. G. W. Kingsbury, *History of the Dakota Territory*, S. J. Clarke, Chicago, 1915, Vol. III, p. 363.

48. *Ibid.*, pp. 363, 364.

medical legislation in 1909, the task of the State Medical Association seemed to be two-fold. The public and the political leaders of the state must be educated concerning the medical needs of the state, and a spirit of co-operation and unity must be created within the medical profession.

The legislative picture was not entirely black, as certain gains had been secured. An optometry bill aimed at legalizing vendor spectacle salesmen had been defeated. Quack advertising had been brought under state regulation. In addition, certain missionary work had been achieved among members of the state legislature. As for the future, Dr. J. G. Parsons of Sioux Falls urged the association to make the provisions of the Mertens Bill the "paramount issues" and recommended complete co-operation in attempting to achieve such legislation. The task would be a large one.

It will require education of the general public, to realize that good health administration is their right. Beginning with the primaries and carried through election, legislators must be committed to the support of this legislation. This means that the profession must be vitally interested in it, and must be so organized as to be in a position to demand and get it.⁴⁹

BOARD OF HEALTH

It was with such stimulation and encouragement that members of the association undertook to influence legislative action at Pierre during the winter of 1912-13. A Board of Health bill was drafted by the association and presented to the legislature for action.

This bill greatly increased the powers of the board, combined the State Examining Board and the State Board of Health, increased the appropriation, and put the appointment of the officers into the hands of the State Medical Association.⁵⁰

Dr. R. D. Alway, secretary of the association, gave an accounting of the association's efforts on behalf of this Public Health Bill at the annual session held at Vermillion in 1913.

We were not successful in getting the bill through the legislature as originally

drafted, but we got the most of it. His Honor, the Governor, soon put the shears to the paragraph relating to the appointment of officers, but we got a good bill, and one almost equal to that of Minnesota or Kentucky.⁵¹

This Board of Health Bill (House Bill 256) created a dual board, consisting of the Board of Health and the Board of Medical Examiners, to be composed of five members appointed by the governor. There were two primary duties of the board: to exercise general supervision over all matters of public health and to conduct all examinations for those people desiring to engage in the practice of medicine, surgery, or obstetrics.⁵²

During consideration of this bill in January of 1913 there had appeared two conflicting forces at Pierre. One was the South Dakota State Medical Association; the other was the South Dakota State Board of Health. The State Board of Health was fighting to stay clear of the control of the State Medical Association and its "political ring."⁵³ It was the power of the Board of Health that prevented the passage of the complete bill in January, 1913. This board felt that the State Medical Association was attempting to gain control of the Board of Health and the State Board of Examiners.⁵⁴ Members of the Board of Health who were medical doctors, but who did not belong to the State Medical Association, resented the association's assumption of the prerogative of representing the entire medical profession in the state. These men naturally objected to the provisions of House Bill 256 giving the State Medical Association the right to select the members of the State Board of Health.

By the second decade of the twentieth century the State Medical Association became more and more aware of the need for creating political interest within its ranks. This arose from the realization that it had little influence in the state legislature; its lobbyist had been "... looked upon as a joke by the

49. **South Dakota State Medical Association, 1904-1914.** Taken from the Proceedings of the House of Delegates, 1909 annual session.
50. **South Dakota State Medical Association, 1904-1914.** Proceedings of the House of Delegates, 1913.

51. **Loc. cit.**

52. **Session Laws of South Dakota (1913),** Chap. 109, p. 89.

53. **Quarterly Bulletin of the State Board of Health of South Dakota, II** (April 1, 1913), 3.

54. **Quarterly Bulletin of the State Board of Health of South Dakota, II** (April 1, 1913), 3.

people and by the politicians especially."⁵⁵ Unity was needed, and the members had to make up their minds to "... work together and vote the same way on legislative issues, irrespective of party politics."⁵⁶

PUBLIC EDUCATION

The passage of legislation, however, was not the only concern of the society in matters of public health. The members realized that public education was needed, and to this end the association in 1913 formed the Public Health Education Committee. Its three members, appointed by the president of the association, functioned on both the state and local level and were to "... provide for education of the public along sanitary lines."⁵⁷ Briefly, the duties of the Public Health Education Committee were stated as follows:

... to give to the public through appropriate means such information as may be needed to enable them to protect themselves from preventable disease, to teach them the importance of demanding the services of adequately supported public health agencies, and their duties to co-operate with these agencies for the public will. These duties should be understood by all physicians as part of what they owe to society, while the special duty of this committee is that of leadership.⁵⁸

The first report of the Committee on Public Health Education was given by Dr. J. G. Parsons during the annual session held at Watertown in 1914. His report recommended the changing of the name of the committee to Health and Public Instruction so that it would conform to its counterpart in the American Medical Association. It was urged also that a woman be placed upon the committee to facilitate co-operation with the women's clubs and organizations of the state.⁵⁹

The heavy duty of public education was to rest upon the local districts. It was up to them to provide the speakers and lecturers

that would tour the state, appearing before women's clubs, college classes, teachers' institutions, and other interested groups. It was recommended that "... there should be a corps of four or five speakers in each society with talks prepared on some of the more important health topics ready for the assignment to appointments when requests are made."⁶⁰

During the year of 1916 to 1917 association members spoke to "aggregated audiences of over 3,000 people." A few of these major speakers included Doctors Bower and Delaney of Mitchell; and Doctors Ashcroft and Martin of the Black Hills.⁶¹

In meeting this task of educating the people of South Dakota to the needs of public health, the association was aided by a number of other agencies. Perhaps the greatest assistance came from the Red Cross Seal Commission, whose sales for the winter of 1914-1915 amounted to over \$3,300 as a result of the energetic direction of its chairman, Mrs. E. P. Wanzer of Armour, and the able support of the women's clubs over the state. Ninety per cent of this amount was expended in educational work in the state.⁶²

In order to increase the efficiency of this educational crusade the formation of a State Public Health Association along the lines of the Minnesota Public Health Association was proposed in 1916. The purpose of creating this agency was to

... secure membership and dues or other contributions from among the influential members of the laity and profession, such as will make it possible to carry on public-health propaganda in systematic and intensive manner, co-operating with existing agencies and helping to develop public sentiment for their support.⁶³

There was more to be desired through this drive for education than merely teaching people how to protect themselves from disease. What was needed was "... an intelligent public sentiment which will insist that as citizens and taxpayers the state shall use

55. *South Dakota Medical Society*, 1914-1919. Proceedings of the House of Delegates, taken from report of Committee on Medical Legislation, 1917, annual session.

56. *Loc. cit.*

57. *South Dakota State Medical Association*, 1904-1914. Taken from the minutes of the secretary, 1914, annual session.

58. *Ibid.*, Proceedings of the House of Delegates, 1914.

59. *Ibid.*, Report of Public Health Education Committee, 1914.

60. *South Dakota Medical Association*, 1904-1914. Report of Public Health Education Committee, 1914.

61. *South Dakota Medical Society*, 1914-1919. Proceedings of the House of Delegates, 1917.

62. *Ibid.*, taken from the report of the Committee on Health and Public Instruction for the year ending May 15, 1915.

63. *Ibid.*, Proceedings of the House of Delegates, 1916.

a reasonable amount of care in protecting them against disease.”⁶⁴

This protection was limited in South Dakota, as reported by the association's Committee on Health and Public Instruction in 1916. “We have the most inefficient and underpaid Department of Public Health in America. The sum of \$8,000 is the total amount available for all purposes, while I am told, the stallions of the state get \$16,000 and the fish and game over \$40,000.”⁶⁵

It was apparent that some type of reorganization was necessary if South Dakota was to give its citizens proper public health protection. To this end the State Medical Association's Committee on Public Health and Instruction in 1917 prepared a report of reorganization of the Public Health Service in the state. The committee made the following suggestions as to reorganization.⁶⁶

First, that the executive officer of the State Board of Health be a trained specialist in public health administration, preferably a physician with a D.P.H. degree.

Second, at least two expert field men (epidemiologists) should be hired to make first-hand investigations of the sources of disease and to take charge of epidemics.

Third, provision should be made for the collection of morbidity and mortality statistics under the supervision of the State Board

of Health so as to better enable the medical profession to prevent and control disease.

Fourth, food and drug investigations should be brought under the control of the State Board of Health.

Fifth, provision should be made for public health education, both for the general public and for health officers.

Inasmuch as these recommendations aluded to legislative changes, it can be seen that the over-all plan of the State Medical Association in the matter of public health education was twofold. First, there was a basic desire to develop a healthy population through sound practices of sanitation. Second, the association hoped to secure basic public health legislation on the state level.

It was estimated that an annual expense of twenty-five thousand dollars would be required to carry out this work. Two proposals were recommended for raising this money: to turn into the public health fund the fees received (per year) by counties for marriage licenses (an estimated five thousand dollars) and to make available the surplus turned into the state treasury by the Food and Drug Commission, which had amounted to twenty-three thousand dollars in 1916.⁶⁷

Protection of the general public in matters of medical ethics and professionalism was of primary concern to the association. However, it became apparent that the physicians must also be protected from the public.

64. **South Dakota Medical Society**, 1914-1919. Proceedings of the House of Delegates, from report of the Committee on Health and Public Instructions, 1916.

65. **Loc. cit.**

66. **Dakota Medical Society Records**, 1914-1919.

67. **South Dakota Medical Society**, 1914-1919. Taken from the Proceedings of the House of Delegates, 1917, annual session.

(Continued in March)

CORRECTION

The Post-graduate Sessions on Water and Electrolyte Balance are to be Held **April 3, 4, 5, 6** at the Medical Science Building in Vermillion, S. D.

COUNCIL MEETING

Marvin Hughitt Hotel, Huron, S. Dak.

January 13, 1957

Meeting called to order by

Chairman Davidson

The following were present: Drs. Davidson, Peeke, Morrissey, Askwig, Lenz, McCarthy, Stoltz, Stransky, Skogmo, Sattler, Bailey, E. A. Johnson, McDonald, Lampert, Reding, comprising a quorum. Guests: Drs. Wold and Geib.

Motion made by Dr. Askwig and seconded by Dr. McDonald that the minutes of the last meeting be dispensed with as they were printed in the Journal. Motion carried.

OLD BUSINESS

A discussion on Blood Banks was presented by Dr. Geib. Motion made by Dr. McCarthy and seconded by Dr. Peeke that the Association support the work of the Blood Bank Committee and that the Committee continue in its endeavor to secure Blood Bank donors. Motion carried.

Motion made by Dr. Lampert and seconded by Dr. Stoltz that the Medicare fee schedule be published and sent to each doctor, and indicate that their normal charges should be used. Motion carried.

Mr. Foster discussed the Medicolegal Conference. No action taken.

Motion made by Dr. Askwig and seconded by Dr. Reding that the Prepayment Insurance Plans Committee of the Medical Association keep on endorsing good insurance companies. Motion carried.

The Watertown District Medical Society nominated Mrs. Harry T. Dory for a nominee of the Distinguished Service Award. Dr. McCarthy suggested that the Association send out another letter to the District Secretaries about this Award and that it be brought up at the next House of Delegates meeting.

Motion made by Dr. Stoltz and seconded by Dr. Peeke that the Association print 10,000 public relations booklets entitled "What's the Answer" and distribute through doctors offices. Motion carried.

NEW BUSINESS

Motion made by Dr. Lampert and seconded by Dr. Peeke that the Association present two \$100.00 Scholarships to medical students at the University of South Dakota, and also \$50.00 to help defray the expenses of a student attending the Student A.M.A. annual meeting. Motion carried.

The following physicians were nominated by the Council to fill the two vacancies on the Advisory Council to the State Department of Health. The two will be appointed by the Governor.

Drs. Wessman, Patt, H. E. Davidson, Rank, Brooks Ranney, and Cowan.

Motion made by Dr. Sattler and seconded by Dr. Stoltz that the Basic Science Law be amended to conform with details worked out by the Joint Committee of the Healing Arts professions, and that the Medical Association be represented by Drs. Davidson, Peeke and Reding, who shall continue to work with the Committee without any financial commitments from the Association. Motion carried. Motion made by Dr. Morrissey and seconded by Dr. McCarthy that our paid retainers be instructed to amend the Basic Science Law insofar as injunctive powers against illegal practitioners are concerned. Motion carried. Motion made by Dr. Stoltz and seconded by Dr. McDonald that the Association contribute \$50.00 to the National Society for Medical Research. Motion carried.

Motion made by Dr. Morrissey and seconded by Dr. Sattler that the Medical Assistants Association set up their own organization and that the Association cover the costs of organizational mailings to each doctor. Motion carried.

Nominees to a position on the Board of Medical Examiners to the Governor were made as follows: Drs. F. F. Pfister, R. A. Buchanan, and C. L. Swanson.

Motion made by Dr. McCarthy and seconded by Dr. Stransky that the Association retain

its special Program Committee consisting of the officers and that if any specialty group is interested in securing a speaker that they appoint one individual to inform the Committee of such selection and that this is to be done after the Annual Banquet. Motion carried.

Motion made by Dr. Lampert that a Committee of three, appointed by the Chairman, study the Pay, Vacation and Sick Leave Policy of the Association office and that the Committee give a report at the next regular meeting. Seconded by Dr. Stoltz and carried. Appointed to this Committee by the Chairman: Drs. Sattler, Reding and McDonald.

Motion made by Dr. Lampert and seconded by Dr. Peeke that the Time Insurance Company Plan for group loss of time be referred to the Prepayment Insurance Plans Committee, and a report be brought back to the Council at its next meeting. Motion carried.

Motion made by Dr. Sattler and seconded by Dr. Morrissey that the South Dakota Blue Shield Plan provide an additional allowance of up to \$20.00 per day for any three (3) days of each stay, to be allowed at the discretion of the Adjudication Committee, and at the written request of the attending physician. This motion to be referred to the Prepayment Insurance Plans Committee. Motion carried.

Motion made by Dr. Stoltz and seconded by Dr. McCarthy that Mr. Foster contact other State Medical Associations that have the V.A. Home Town Care Program to find out how they are going to negotiate the V.A. Contract for next year, and if necessary to call a special executive committee meeting. The Association objects to loss of the program in which direct governmental contact is made with the physician. Motion carried.

Motion made by Dr. McCarthy and seconded by Dr. McDonald that Dr. Peeke represent the South Dakota State Medical Association at a meeting in Chicago January 26 concerning the Polio vaccine. Motion carried.

Motion made by Dr. Lampert and seconded by Dr. McCarthy that the Association work in cooperation with the Welfare Department on a program for medical care for recipients of Categorical assistance, and that the presi-

dent of the Association appoint a special committee or designate one of the Associations Committees now in existence to study this program. Motion carried. (Referred to Committee on Indigent Care).

Motion made by Dr. Lampert that the Association actively engage in Legislative efforts to secure appropriations for the Welfare Department to activate program of the previous motion. Seconded by Dr. Peeke and carried. Motion made by Dr. Sattler and seconded by Dr. Askwig that the president of the Association appoint four persons to go to Washington to visit with our congressional delegation concerning medical legislation. Motion carried.

The Coroner's Law was discussed, but no action taken on the Coroner's Law inasmuch as action was taken at the last meeting.

Motion made by Dr. Sattler that the Association do not favor a Nurse Scholarship Loan as presented, but supports a program for graduate nursing training only. Seconded by Dr. McCarthy and carried.

Recommendations of Legislative Research Council on Department of Health were read and the following actions taken:

Recommendation No. 1 suggests a change in the makeup of the State Health Advisory Council. It is felt that the present Council is too large and there is no reason why each member must be appointed from a specific profession. This leads to special interest in pushing one program which can be detrimental to the over-all coordinated work of the Department. Preference would be for a five member board and with adequate medical representation.

Motion made by Dr. Lampert that Recommendation 1 be accepted.

Seconded by Dr. McDonald. Motion carried.

Recommendation No. 10 recommends elimination of the Hospital Advisory Council. This

is actually not Dr. Anderson's recommendation. He suggested that the Health Advisory Council take more responsibility for the decisions in the hospital construction field which are now delegated to the State Health Officer. We cannot eliminate the Hospital Advisory Council since it is required by federal law if the state is to receive federal Hill-Burton funds for construction of hospitals and related facilities.

Motion made by Dr. Stoltz and seconded by Dr. Peeke that Recommendation 10 be accepted. Motion carried.

Item 11 recommends that the enforcement of the laws relating to restaurants, hotels, etc., be transferred to the Department of Health. The Department is willing to assume this obligation together with operation of the milk laws if the legislature should take such action. We would insist, however, on adequate

funds for employment of sufficient qualified personnel to properly do the job.

Motion made by Dr. McCarthy and seconded by Dr. Stoltz that Recommendation 11 be accepted. Motion carried.

Item 14 regarding tuberculosis is concurred in.

Motion made by Dr. Johnson and seconded by Dr. Stoltz that Recommendation 14 be accepted. Motion carried.

Motion made by Dr. McCarthy that the Association endorse the Radiation Protection Act. Seconded by Dr. McDonald and carried. Motion made by Dr. Stransky that occupational disease listing be eliminated in the Workmen's Compensation Act and that other terminology be inserted. Seconded by Dr. Sattler. Motion carried.

Adjourned upon motion at 5:15 P.M.



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BROWN DRUG COMPANY

Sioux Falls, South Dakota

MEDICAL SCHOOL AFFAIRS COMMITTEE

Marvin Hughitt Hotel, Huron, S. Dak.

January 12, 1957

The following were present: Drs. McVay, Gillis, Hard, Price, Morrissey, and Peeke.

Dr. Walter Hard presented the following program to the group.

1. Recommendation to Council for allocation of funds for the two medical student scholarships to be awarded in April. This is to total \$200.00.

Also \$50.00 to partially defray travel expenses of delegate to S.A.M.A. annual meeting.

Dr. Price moved that the Committee recommend to the Council of the S. D. Medical Association the allocation of funds for two medical student scholarships in the amount of \$100.00 each, and also \$50.00 to help defray the cost of a delegate to the Student A.M.A. annual meeting. Seconded by Dr. Gillis. Motion carried.

2. Dr. Thomas Y. Nakao, Los Angeles, Endowment for medical scholarships in amount of \$8,000.00.
3. Consider recommendation for Distinguished Service Award to Mrs. Harry T. Dory.

This recommendation is to be brought to the attention of the Council.

4. Admissions:

(1) Increase in acceptance deposit to \$100.00

(2) Increase in tuitions:

Average all Med. Schools \$684.00
In-State — \$320.00 vs. \$285.00
Out of State — \$550.00 vs. \$495.00
Average all Med. Schools \$857.00

5. Postgraduate Courses:
December—5 doctors-Isotopes

April 3-6—Fluid and Electrolytes
Annual Banquet—April 6

6. A.M.E.F. contributions—Designated to U.S.D.

1956—124 Contributors—\$5,046.50
\$40 Average

1957—101 Contributors—\$4,988.45
\$49 Average

7. Medical ethics in medical curriculum reference A.M.A. recommendation. Present inclusion in program at U.S.D.
8. Research grants received during 1956 total \$41,000.00.
9. Summer programs for medical students
—Response:

Funds for U.S.P.H.	\$3,200.00
Polio	1,200.00
Lederle	600.00

\$5,000.00

10. Budget-Appropriations for 1956-57—
\$183,080.00

Requested for 1957-58 and 1958-59—
232,830.00

Increase of

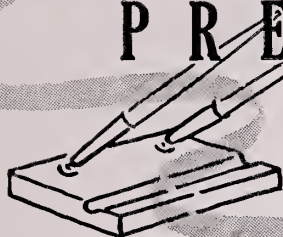
49,750.00 or 27%

Governor's budget recommended
231,420.00 or 25%

This increase, if available, **Not** to be misconstrued as salary, increase, for reasons discussed. Support for appropriations.

The Committee members also discussed the possibility of any physician interested in lecturing at the medical school on Medical History should contact the medical school. It was also suggested that an appeal for such physicians be put in the South Dakota Journal of Medicine.

P R E S I D E N T ' S P A G E



Dear Members:

I have just attended a meeting called by the AMA for the purpose of exterminating paralytic Poliomyelitis.

I enjoyed the privilege of attending this meeting and only wish that each one could have heard the papers and caught the spirit of this great drive to eliminate this dreaded disease from the list of diseases so crippling to mankind.

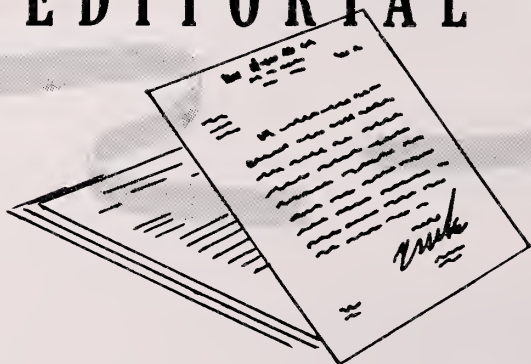
Just think, we have the vaccine which has been proven safe, effective and available in amounts now to vaccinate our whole population up to those 40 years of age. It is our purpose to accomplish this before the 1957 polio season. Our offices are equipped to do this job. Our doctors and their office personnel are trained to do this and if need be we can organize ways and means at our various local levels which will be best suited to get the job done.

This business of preventive medicine and the care of the sick has been the province of the medical profession and we have spearheaded and worked toward this end all thru the ages, but, there have been times when we have allowed the responsibility to be taken over by others. This is a golden opportunity for us as members of the South Dakota State Medical Association to exert our leadership in this drive to give the public the fruits of medical research.

The problem of getting the vaccine into the arms of all those up to 40 years of age is going to require quite some doing. This is a community, county and state activity and is going to have to enlist the cooperation of all agencies and organizations, T.V., Radio, newspapers, schools, churches, veterans organizations to educate the people about the safety effectiveness and availability of the Salk Vaccine. We should aim to get two (2) 1 cc shots 1 month apart, in before March 25th. That is quite an order, but, I know we can do it if every doctor gets behind this movement.

Yours sincerely,
Alonzo P. Peeke, M.D.

EDITORIAL PAGE



THE FINAL TRIBUTE

Two recent funerals have been called to the attention of the Editors of your Journal which have caused us to stop and comment.

These two funerals were just like any others, except that they were funerals of two doctors of long-time South Dakota practice. The comment that has reached us is one concerning lack of doctor attendance at these funerals. At one, there were two doctors present — at the other, just four.

It certainly seems proper that with the closely knit District Medical Societies we have, that someone in each District should be responsible for organizing a final tribute to their colleagues. This could include the doctors attending and being seated in a body as well as making a material gesture.

At least one of our Districts sets up funeral attendance for its members in a group and another makes a memorial contribution to the S. D. Medical School Endowment Fund. Perhaps both activities should become routine with all the District societies.

WILLIAM G. MAGEE, M.D. 1875 - 1957

Dr. William George Magee, 81, who had practiced medicine in Watertown since 1908, died January 1st at a Watertown hospital. He was a former president of the South Dakota Medical Association.

He was a charter member and first president of the Watertown Kiwanis Club. Dr. Magee was a member of the American Medical Association and the state and district medical associations.

He also was a staff member of Memorial Hospital since it was founded, as well as being on the staff at St. Ann Hospital since it was organized.

Funeral services were held at 2 P.M. January 5th in the Methodist Church where he was an active member. The Rev. E. C. Antrim, pastor officiated.

Doctor Magee was born at Dunkerton, Ia., April 19, 1875. He spent his early life in Iowa and graduated from Iowa State Teachers College in 1900.

For one year he taught school, then entered Northwestern University medical school, graduating in 1905. Following two years internship at Wesley Memorial Hospital, he practiced at Chicago Heights for a short time. He came to Watertown in 1908, and practiced until his retirement two years ago.

His wife, Charlotte Irene MacChesney, to whom he was married June 30, 1909, at Chicago Heights, Ill., died Jan. 12, 1955. His parents, two sisters and four brothers also preceded him in death.

Survivors are one son, William G., Watertown; two sisters, Mrs. J. Y. Campbell, and Mrs. Adde Dunkerton, both of Dunkerton; two brothers, E. W. Magee, Dunkerton, and Dr. Emery E. Magee, Waterloo, Ia.; three grandchildren, Nancy Claire, Julie Lynn and Michael Timothy, all of Watertown.

MEDICAL LIBRARY BOOKSHELF



MEASLES

Much progress has been made in recent years in isolating the measles virus, determining its infectivity and analyzing its pathogenic, immunogenic, and other biological properties.

Dr. John F. Enders, Chief of the Research Division of Infectious Diseases, Childrens Hospital, Boston, brought out in a report given at a recent American Public Health Association Convention at Atlantic City in November, that he has succeeded, in collaboration with others, in propagating the virus in chick embryos. This is significant because the inactive virus would represent the most valuable material for the preparation of the vaccine, and would afford not only the absence of extraneous viruses in the starting material but would greatly reduce the cost of manufacture. He warned however, that "much investigation will, however be necessary, since first it must be determined whether multiplication of the virus in chick tissue will continue indefinitely, whether sufficient viral antigen is produced under these circumstances to be immunogenic when inactivated, or whether attenuation of pathogenicity for monkeys and man may occur as a result of passage in chick tissue."

Found in the June 1956 issue of *American Journal of the Medical Sciences* page 622, is an article by Dr. Enders entitled "Observation on Certain Viruses Causing Exanthematous Diseases in Man."

After 15 years of unsuccessful attempts at finding ways of propagating the virus of measles in monkeys, chick embryos, chick embryo tissue culture, and even culture consisting of human placental tissue, Dr. Enders and his associate Dr. Peebles, after being shown that polio could be cultivated in a

variety of human tissues, decided to try the same system with measles virus by introducing into roller tube cultures of human kidney tissue blood or throat washings from typical cases during the first 24 hours of the rash.

Interesting cytopathic changes including syncytial or "giant cell" formation resulted and the conclusion is revealed that the virus which produces the effects in human renal cells represents the etiologic agent of measles. Viral neutralizing antibodies capable of preventing cytopathic changes have been shown to develop regularly and promptly in nearly all cases of measles examined.

In conclusion Dr. Enders points out that "if we are correct in thinking we are in possession of the etiologic agent of measles we have now the means of directly assaying the protective antibody in human globulin. Furthermore, the possession of the virus in a form that can be manipulated in the laboratory may lead eventually to the development of a practical way of inducing active immunity."

In any study of the history of measles, *The Observations Made During the Epidemic of Measles on the Faroe Island in the Year 1846* by Peter Ludvig Panum, Delta Omega Society 1950, would be included. This is a "public health classic."

This epidemic represented a rare opportunity for field investigation. The natural isolation of the islands coupled with restrictions upon commerce imposed by the Danish government has resulted in exclusion of measles for sixty-five years. The population was small and the inhabitants were scattered over a number of small islands, separated by swiftly flowing channels making inter island travel difficult.



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No other exanthematous disease was present to confuse the picture.

The epidemic was found to be caused by an individual exposed to the disease in Copenhagen and introducing it to the Faroese, and it was then carried from one island to the other by boat.

The first section of Panum's report is descriptive of the environment, living conditions, and health of the Faroese followed by an account of prevailing diseases and an analysis of vital statistics. The mortality from measles was just under 23 deaths per 1000 inhabitants, especially destructive in infancy and the sixth decade of life (from 20—60). From personal observation he discovered that a latent period of from 13-14 days was required to develop the exanthem. This same interval was observed to occur in other members of infected households.

"The rule that the contagion of measles does not produce any symptoms of illness at all for a considerable time after it has been received into the organism and then according to my observation, after an indefinite prodromal period, brings forth the well known exanthem always on the thirteenth or fourteenth day, has thus proved constant for me in a significant series of accurate observations." His inquiries were carried on in 52 different villages.

The basis of our knowledge of the epidemiology of measles is still based on this remarkable study by Peter Ludwig Panum in 1846.

Mrs. Esther Howard
Medical Librarian

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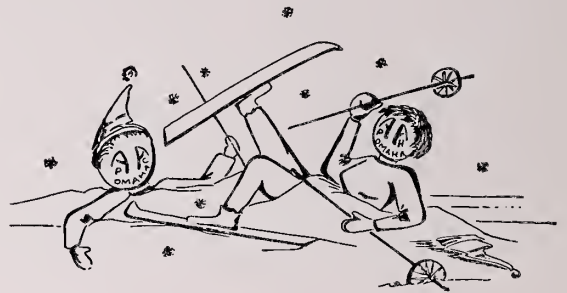


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This is your MEDICAL ASSOCIATION

NEWS NOTES

Dr. Wallace K. Kucera has joined the staff of the Home-stake Hospital. Dr. Kucera has just completed two years of military service.

* * *

Dr. Robert E. Staats has left Winner to accept a residency at Walter Reed Army Hospital. Taking over his practice with **Dr. Robert Hayes** is **Dr. Harold Phelps**.

* * *

The **Dakota Farmer** is now using a health column service provided by the Rural Health Council of the AMA through the Medical Associations of North and South Dakota. Called "The Doctor Says" the column deals with common health problems.

* * *

Dr. S. W. Fox, Pierre, took a months' medical tour of the Mediterranean early in the winter.

* * *

Dr. L. C. Askwig, returned to full practice after more than a months' layoff induced by injuries from an auto accident.

* * *

Dr. Thomas Y. Nakao, Los Angeles, California, has contributed \$2,000.00 to be added to a medical scholarship fund established by this physician two years ago. A total of \$8,000.00 is now represented as contributions from Dr. Nakao.

Dr. Hugo C. Andre, Vermillion, South Dakota, addressed the South Dakota Chapter of the Student American Medical Association Wednesday, January 9, speaking on the subject of "The Philosophy of Medical Practice."

NATIONAL RURAL HEALTH CONFERENCE TO KENTUCKY

The Blue Grass country of Louisville, Ky., will be the scene of the American Medical Association's rural health "derby" March 7-9. Sponsored by the Council on Rural Health, this 12th National Conference on Rural Health will be held at the Brown Hotel. It will feature discussions on various problems of rural health and medical care. Built around the theme of "Together We Build," the Conference will open with greetings from the Hon. A. B. Chandler, governor of Kentucky, the Hon. J. Andrew Broaddus, mayor of Louisville, and Dr. George F. Lull, AMA secretary-general manager. Also scheduled to speak Thursday morning, March 7, are Dr. F. S. Crockett, Council chairman; Dr. Austin Smith, AMA Journal editor, and Dr. Julius Michaelson, chairman, Alabama State Medical Asso-

ciation committee on medical service and public relations.

The Friday program will cover the economics of agriculture and medical and hospital care costs and health and medical care problems of farm laborers and migrant workers.

PANAMANIAN MEETING SET FOR APRIL

The Second Inter-American Medical Convention will convene at the Hotel El Panama, Panama City, Republic of Panama, April 3, 4 and 5th, 1957, under the sponsorship of the Medical Society of the Isthmian Canal Zone, a chapter of the American Medical Association since 1906. Colonel Charles O. Bruce, MC, USA, Chief Health Officer of the Panama Canal Company and President of the Medical Society, will act as keynote speaker at the invocation ceremonies, which will include addresses by the President of the Republic of Panama and by the Governor of the Panama Canal Zone.

In addition to the Scientific Papers, a full round of entertainment is planned for families who accompany the delegates. A buffet dinner for all the delegates and their families will be held in the Patio of the Hotel El

Panama on Wednesday evening. A luncheon for the visiting wives will be sponsored by the Doctor's Wives Club of the Republic of Panama at the Union Club at noon on Thursday, followed by conducted shopping and sightseeing tours by the same ladies through the exotic oriental shopping centers of Panama City. Sectional dinners of the various specialties will serve as a get together for like murals on Thursday evening, and this will be followed by a fashion parade in the El Panama Patio by the Doctor's wives Club of the Panama Canal Zone. Trips on ships transiting the Canal, Deep Sea Fishing in the Bay of Panama, trips into the Interior of Panama and many other such diversions are available.

MD's SPEAK IN AMA SURVEY

Five hundred individual physicians were given a chance to put themselves in the shoes of the president of the AMA recently and asked to suggest the changes they would make in the Association.

These physicians, questioned in a nationwide survey authorized by AMA, most often call for closer ties with the individual physician and for further improvements in public relations.

About one doctor in five thinks AMA should get closer to individual doctors, perhaps pool their ideas on important subjects to get a more accurate indication of their feelings. A smaller percentage thinks there should be a

greater representation of young doctors within the Association.

Improved public relations and public information was the second important Associational change suggested. Concentration upon these areas was called for by 14% of the doctors.

Nine percent cite social security or pensions for doctors. One out of twenty requests liberalized hospital affiliation requirements and about the same number suggest higher standards for practice. About five percent say improvements ought to be made in the Journal of the A.M.A.

Smaller percentages (3%) say opposition to government medicine should be strengthened by the Association and 2% call for elimination of fee-splitting. Increased post-graduate training is also suggested by 2%.

About one doctor in ten says he thinks the Association needs no improvements — that it's satisfactory as it is.

AMEF REPORTS TOP YEAR

The American Medical Education Foundation has just completed its fifth year of operation with a record total of \$1,072,717 in contributions.

This figure represents a 41 per cent increase over last year's total of \$757,163.29 with the \$125,000 grant to the Foundation made by the American Medical Association at the Clinical Meeting in Seattle, or an increase of 25.1 per cent not considering the added generosity of the A.M.A.

The \$125,000 was in addition to an original gift of \$100,000 voted by the Board of Trustees earlier in the year.

Grants to the country's 83 medical schools will be made later in the month after final computations have been completed.


Annual lists and totals by states will be published by the time of the State Chairmen's Meeting at the Drake Hotel in Chicago on January 27, where they will be placed in the hands of those attending.

The success of the Foundation can be attributed directly to the hard work and foresighted planning of the State Chairmen who have given so much of their energies to AMEF in 1956. Because of these efforts, we have every reason to believe that 1957 will be an even greater year.

REGIONAL MEETING OF THE AMERICAN COLLEGE OF GASTROENTEROLOGY

A regional meeting of the Central Region of the American College of Gastroenterology will be held in Grand Rapids, Mich., Sunday afternoon, 17 March 1957. The Scientific Sessions will be at the Hotel Pantlind commencing at 1:45 P.M.

Members of the medical profession are cordially invited to attend. A copy of the program may be obtained from the Secretary, American College of Gastroenterology, 33 West 60th Street, New York 23, N. Y.



PHARMACEUTICAL

SECTION

HAROLD S. BAILEY, PH.D.

EDITOR

Division of Pharmacy
College Station, South Dakota

PHARMACEUTICAL *Paper*



VETERINARY MEDICINE AND THE PHARMACIST*

III. Veterinary Biologicals
Lawrence W. Price D.V.M.**
Chicago, Illinois

Hog cholera is the number one killer of swine. Every year the swine industry suffers from a tremendous death loss due to this disease. Any discussion of veterinary biologicals, particularly in this area of the country, must include material on this subject.

Hog cholera is caused by a virus. In the United States swine are quite susceptible to infection by this virus. We might say that they are super-susceptible. For example, one-millionth of a cubic centimeter of virulent hog cholera virus can kill a susceptible hog upon inoculation. Because of the nature and extreme virulence of the disease, modified live hog cholera vaccine or for that matter any vaccine or prevention attempt which is highly efficient presents a stress to the animal.

Stress Factors in Swine

There are three factors which contribute to the state of stress in immunized swine — low protein reserve, internal parasites, and anemia. Swine are born with low protein reserve. They are always right on the borderline between adequate and inadequate protein relationships to further their own body building mechanism. We have here an animal born weighing from two to three pounds and

in six months weighing about 230 pounds. Swine convert feed very rapidly in a most amazing fashion. They gain weight rapidly even in spite of the poor nutrition and poor management to which they are exposed at times.

This low protein reserve factor is important economically. The protein concentration fraction of the feed the farmer has to buy is the most expensive fraction. When the price of swine is low and remains low on the market and the cost of the protein fraction remains the same, the farmer feeds the animals more corn. Now by tradition we use corn as a feed for hogs. It is probably one of the poorest feeds for a hog. Also by tradition it took 10-11 months to raise a hog for the market by feeding large amounts of corn.

Another serious stress factor in any immunization attempts in swine is the presence of internal parasites. This is one of the very serious problems in animal health on the farm. Most swine have the large round worm present. In fact, the large round worm is even passed on to the baby pig in utero. In a technical sense the baby pig can be born with an adult phase of the large round worm in its body. If not, the baby pigs certainly contact the eggs of the parasite and become infected shortly after birth. The extent of infestation is, as we have discussed previously, directly related to the management practices on the farm.

*The last of a series of three papers devoted to veterinary medicine and the pharmacist—Ed.

**Associate Director, Veterinary Professional Service, Lederle Laboratories Division, American Cyanamid Co.

The third stress factor is anemia. Swine are particularly susceptible to the hypochromic type of anemia. The usual solution to this problem on the farm is a shovelful of dirt in the feed. Swine very often will obtain enough copper and iron from the dirt to get them over their primary anemia. However, we all realize that this form of therapy is not a lasting one. Also, more serious is the fact that the shovelful of dirt from the barnyard may contain round worm and other parasitic eggs.

In summary then, the three important factors leading to stress in the immunized animal are low protein reserve, internal parasites and anemia.

Hog Cholera Immunization

There are at present two schools of thought concerning medication for immunization of swine against hog cholera — the older two injection method of serum plus live virus and the newer modified live virus one injection method. Here are some of the facts concerning the use of these methods.

First of all with the use of serum and virus the farmer is encouraged to vaccinate his hogs very early. Not only is he encouraged by the veterinarian to vaccinate early, but he has a further motive. The dose of serum and, therefore, the cost varied directly with the weight of the animal. One of the advantages of the modified live hog cholera vaccine is that the dosage is the same for any weight animal. A hog can be vaccinated at any age except at the age of about six weeks or just at weaning time. During this particular period in the animal's life there is a changing of body metabolism.

Of course, it is better to vaccinate early in the life of the animal if possible. The younger the animal, the shorter period of time the pig has been exposed to the parasitic and bacterial environment of the farm. The longer an animal is exposed to that environment the poorer the antigenic response to hog cholera.

One of the distressing problems encountered with modified live virus vaccine is the same as that found after vaccination with serum and virus — post vaccination stress. In the case of vaccination with serum and virus, the runts are usually killed. In many litters there seems to be one runt or a pig that just does not seem to grow as well or

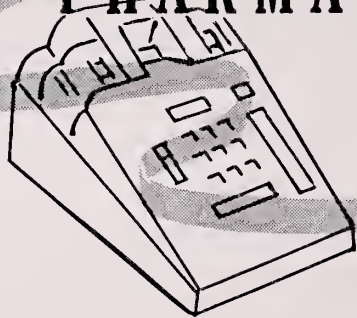
have the strength of the others. When the live virus hits that undernourished and probably dehydrated pig, death inevitably results. However, the farmer is well adjusted to this and probably is glad to see the runts go, as they would not be very profitable animals. In the case of the use of modified live virus vaccine, the largest and best looking pigs are under stress more than the runts. This is due to the fact that the bacterial environment already within the hog presents stress. The bacterial flora are favorably influenced by the strain placed on the animal by the injection of the virus. Also, the larger animals and the fastest gaining animals need every inch of respiratory tract and lung space to keep the respiratory and circulatory systems functioning properly. They also need every inch of absorptive space from the intestinal tract for nourishment. These animals can be thrown very quickly into negative nitrogen balance when a stress is placed upon them.

Obviously, one solution to this problem is to destroy some of the overwhelming bacterial flora before vaccination by means of an antibiotic. If a broad spectrum antibiotic is used for about three days before hog cholera vaccination and ten days after vaccination, there is an excellent chance that the bacterial environment will be under control. Then the hog will have a better opportunity to convert whatever nutrition is available to its own use and not only maintain nitrogen balance but help in the control of one of the other stress factors — anemia.

There are two other critical factors involved in the total picture of hog cholera immunization. First, hogs should not be vaccinated for about a week after they have been wormed. Second and more important is the diet of the animals. If they are being fed a formulated feed, there is no worry since the protein, carbohydrate and fat balance in a formulated feed is very carefully controlled. However, if the swine are being fed free choice corn, there is concern. A hog can do a very adequate job of balancing his own ration under normal conditions. However, when a hog has an intestinal disturbance, he will no longer balance his ration. A hog that has an intestinal infection or is heavily parasitized will try to eat either all carbohydrate or all protein. Approximately three days after

(Continued on Page 75)

PHARMACEUTICAL ECONOMICS



FAIR TRADE IN 1956

By

John W. Dargavel, Sc.D.*
Chicago, Illinois

At the end of 1956, fair trade continued in full force in 35 states having 74.6 per cent of the United States population and accounting for 76.5 per cent of the total personal income in the United States.

These figures (based on latest population and income statistics of the United States Department of Commerce) are somewhat lower than comparable figures in 1955 because during the year, the courts of last resort in five states, comprising 6.4 per cent of the United States population, declared the fair trade laws of these states to be unconstitutional in part or in whole. During the same period, three state courts of last resort upheld the constitutionality of their respective state fair trade laws which provide one of several existing legal sanctions for resale price maintenance.

In the marketplace, fair trade continued to work well in a number of industries, with many manufacturers vigilantly enforcing their fair trade programs. During the past year, too, fair trade proved to be a highly workable solution for the small businessmen who operate gas stations in New Jersey and other eastern seaboard states. For them, the fair-trading of trade-marked brands of gasoline meant a fresh competitive start after years of destructive price-warring. This development in the gasoline field is the most recent and graphic example of how effective fair trade operates to preserve small business in our economy.

* Chairman, Bureau of Education on Fair Trade.

In the Courts

During 1956, the Supreme Court of the United States did not rule on the constitutionality of fair trade, thus leaving intact the landmark decisions upholding the state fair trade acts and the Federal enabling statute, the McGuire Act. However, the high court held (in **United States of America v. McKesson and Robbins, Inc.**) that a company functioning both as a manufacturer and a wholesaler could not make fair trade contracts with other wholesalers, even on its own trade-marked products, since, the Court ruled, this was not provided for in the Federal Miller-Tydings or McGuire Acts.

In the Federal circuit courts of appeal, fair trade was sustained on three occasions but none of these involved issues of constitutionality.

At the state level, three state courts of last resort — California, Massachusetts and Maryland — upheld the constitutionality of their state fair trade acts. Both the Massachusetts and Maryland high courts held that their respective states' fair trade laws did not violate the due process clause of the two states' constitutions nor involve an improper delegation of legislative power; and both stressed the importance of the courts accepting the judgment of legislatures with respect to economic facts.

During 1956, the following five top state courts rendered their state fair trade laws ineffective: Colorado, Louisiana, Oregon, Utah and Virginia. In Colorado, Louisiana and

Oregon, only the non-signer clause of the state fair trade law was held unconstitutional. In Utah, the State Supreme Court ruled the whole fair trade act to be in violation of that state's constitution. In Virginia, the fair trade law was held to be repealed by virtue of an amendment to the Virginia anti-trust laws which was enacted after the Fair Trade Act.

The box score on the constitutionality, in whole or in part, of fair trade in state courts of last resort now stands: 16 for, 10 against. Test cases on this basic issue are now pending in Arizona, Indiana, Kentucky, Ohio and South Carolina.

At the Legislative Level

In state legislatures, fair trade continues to preserve its remarkable record: no state fair trade law, once enacted, has yet been repealed. In its 2nd session, the 84th Congress took no action on the recommendations made by the Attorney General's National Committee to Study the Antitrust Laws, calling for repeal of the Miller-Tydings and McGuire Acts.

During the year, a report by the Senate Small Business Committee found that fair-trading manufacturers and retailers in more than 15 fields reaffirmed the need for effective fair trade. A strengthening of fair trade statutes and improved enforcement were held to be most important. The report was based on a poll of 1,453 manufacturers in fair trade fields and a scientific sampling of the nation's 1,800,000 retailers. The project was carried out by the Committee's Subcommittee on Retailing, Distribution and Fair Trade Practices, with Senator Hubert H. Humphrey (D., Minn.), serving as chairman.

In the Marketplace

Destructive price-cutting on certain classes of products continued to take its toll in a war of attrition in the marketplace. Its effects, as an erosive force on the existence of small business, were especially visible in fields like small electric appliances and housewares, where fair trade enforcement is uneven. In the face of tooth-and-claw price-footballing of non-fair-traded or weakly fair-traded national brands, many small retailers in the electric appliance and housewares fields are reported to be dropping all but the strongly fair-traded brands as a business survival measure.

As another defense against price-warring, large retailers are, in many cases, turning to the promotion of store-controlled brands, bearing the retailer's own label. The prices of their private brands, of course, are absolutely controlled by the retailer in every case, and such brands are not available for price-footballing. The small retailer has found that the private brand is no solution for him since he has neither the reputation nor the financial resources to develop a consumer franchise in merchandise identified by his own name or brand.

Department stores continued to battle with discount houses in 1956 and figures show they are regaining lost business. At the same time they are increasingly losing interest in brands which are being price-footballed. Meanwhile, discount houses added to services — and costs — to compete with department stores. Discount houses are also returning to private brands to realize a profit designed to compensate them for the continually declining profit on national brands. So far as is known, no new discount house of substantial proportions emerged on the national scene during the year; but many smaller ones closed their doors.

In the appliance field, the effects of unrestrained price-cutting as a merchandising policy were increasingly evident. Unlimited price-cutting does not seem to have proved a sales and profit panacea for manufacturers in this field.

Trading stamps were subjected to intensive scrutiny during the year. One lower court in Massachusetts held that the giving of stamps with fair-traded merchandise sold at the minimum fair trade price constituted a violation of fair-trade. Comparative price surveys in several communities showed that in stores using stamps customers pay as much as 8 per cent or more in higher prices, whereas the stamps have a value of only 2 per cent of the value of their purchases. And a U. S. Department of Commerce study concluded that unless a stamp plan boosts a retailer's sales by 25 per cent, he will either lose money or be forced to increase his prices.

A study by the New York advertising agency, Batten, Barton, Durstine & Osborne, showed that 24 per cent of a sample of housewives would switch from one store to another to take advantage of trading stamps, while

76 per cent would not. This finding that three-fourths of the customers would not shift would seem to challenge the belief of many retailers that they must have trading stamps or lose business.

The Outlook

To overcome the adverse state court decisions on constitutionality and the United States Supreme Court decision on statutory interpretation, the Bureau of Education on Fair Trade has developed drafts of fair trade legislative proposals. These are currently being subjected to independent legal research with respect to constitutionality.

Existing small business is being exposed to ever-increasing pressures by the trend toward bigness in our economy on all levels — manufacturing, wholesaling and retailing. The opportunity for starting new small businesses diminishes daily. The weakening of such laws of fair competition as fair trade accelerates the already alarming growth of "forward integration" in this country, evidenced by the growing trend of manufac-

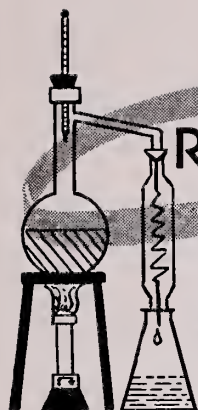
turers toward direct selling and of giant retailers toward private brands. Both trends are a recognition that a stable distribution system is a must for a company owning nationally known trade-marks and being concerned with longevity rather than with immediate sales and profits. Forward integration by-passes small business. It is an inevitable reaction to a marketplace made chaotic by unrestrained price-cutting on merchandise identified by prized brand names or trade-marks.

Small business will look to both major political parties for action to implement their platforms pledging the preservation of small business. One of small business' key goals will be the restoration of effective fair trade over the country.

Small business believes that its survival is in the public interest as well as its own. It does not believe that the American people want an economy where there is no place for the enterprising, efficient, independent individual who wants to be in business for himself.

Thirst, too, seeks quality





RECENT PHARMACEUTICAL

Specialties

NEO-HYDELTRASOL OPTHALMIC SOLUTION

Description: A sterile ophthalmic solution containing sodium prednisolone-21-phosphate, 5.0 mg. and neomycin sulfate, 5.0 mg.

Indications: For suppression of inflammation in the external eye, whether due to physical trauma, chemical irritants, bacteria, foreign proteins, or other specific allergens.

Dosage: One or two drops in the conjunctival sac every hour during the day and every two hours during the night for the first two days. When a favorable response is noted, dosage may be reduced to one drop every four hours, and later to one drop three or four times a day for maintenance.

Caution: Not to be used for herpes simplex, ocular tuberculosis or for infections caused by organisms not sensitive to neomycin.

How supplied: In 5 cc. aluminum-sealed dropper bottles.

Source: Merck Sharp and Dohme.

HYDELTRA T. B. A. SUSPENSION

Description: A 2% (20 mg./cc.) suspension of prednisolone tertiary butylacetate.

Indications: The manufacturer recommends its use in the treatment of rheumatoid arthritis, osteoarthritis, traumatic arthritis (provided no intra-articular hemorrhage is present), and gouty arthritis. The product is also recommended for use in the treatment of various types of bursitis.

Dosage: The product is for intrasynovial injection and for injection into soft tissues only. It must not be administered by any other route. In the intra-articular use of the product, the dosage depends on the size of the joint to be injected and, to a lesser

degree, on the amount of relief required. The manufacturer's literature should be consulted.

How supplied: In 5 cc. vials.

Source: Merck Sharp and Dohme.

GANTRIMYCIN

Description: Tablets containing 333 mg. Gantrisin and 75 mg. oleandomycin.

Indications: Oleandomycin is a new antibiotic principally active against gram-positive bacteria. There is no evidence that it displays cross resistance with most other antibiotics. There may be occasional failures due to resistant strains or cross resistance with erythromycin or carbomycin. The usual precautions in antibiotic and sulfonamide therapy should be observed. Gantrisin is effective against both gram-positive and gram-negative pathogens. It is especially soluble in acid urine. No alkalization or forcing of fluids is needed.

The product is recommended by the manufacturer in the treatment of respiratory, localized pyogenic, systemic and urinary tract infections, when due to gram-positive or gram-negative microorganisms.

Dosage: Adults: 2 or 3 tablets, four times daily. In severe infections, dosage should be increased to 4 or 5 tablets, four times daily. Children over 50 lbs.: 1 or 2 tablets, four times daily. Children under 30 lbs.: 1 tablet, four times daily.

How supplied: Oral tablets, bottles of 50.

Source: Hoffmann-LaRoche, Inc.

TEMPOGEN TABLETS

Description: Each multiple compressed tablet of tempogen provides: a solid inner core of prednisolone, 1.0 mg., and sodium ascorbate, 60 mg., and an outer layer consisting

of acetylsalicylic acid, 0.3 gm., and dried aluminum hydroxide gel, 0.2 gm. Tempogen Forte tablets are also supplied providing twice the amount of prednisolone in the same formula.

Indications: Tempogen tablets are recommended by the manufacturer in the treatment of certain forms of arthritis and other inflammatory conditions in which combined salicylate-adrenocortical hormone therapy is indicated. The antirheumatic effect of aspirin is enhanced by combination with prednisolone. Vitamin C helps prevent adrenal ascorbic acid depletion and the aluminum hydroxide is included to modify hyperacidity which may be caused by prednisolone or aspirin.

Dosage: The dosage depends upon the nature and severity of the condition being treated and the response to therapy. Initially, the suggested dosage is one to four tablets three or four times daily. When a satisfactory response is obtained (usually within one week, occasionally up to two weeks),

dosage should be gradually reduced by steps of one tablet every four or five days until the lowest effective dose is reached. All the precautions pertinent to the administration of prednisolone apply to the administration of Tempogen tablets.

How supplied: Bottles of 100.

Source: Merck Sharp and Dohme.

SELSUNEF OINTMENT

Description: Selenium disulfide 0.5% and Hydrocortisone acetate 0.5% in a petroleum base.

Indications: For use in the treatment of marginal blepharitis, seborrheic dermatitis of the auditory canal or other limited areas of the body, and allergic dermatoses where seborrheic involvement is suspected.

Dosage: Apply one to three times daily. After 30 minutes remove carefully with a clean cloth or tissue. Cleanse area thoroughly before each application.

How supplied: 5 gm. tube.

Source: Abbott Laboratories.

ATTENTION PHARMACISTS

Pharmaceutical Institute

April 9-10

STATE COLLEGE CAMPUS

Brookings, South Dakota

P R E S I D E N T ' S P A G E



Fellow Pharmacists:

Just received a letter from Gil Gross asking me to welcome you fellow druggists to the Pharmacy Refresher Course to be held at Brookings on April 9 and 10, 1957.

It occurred to me that the more members present, the more I could welcome at the meeting and visit with afterwards. I have attended several of these meetings and they are well worth your time and effort. So come if you can and bring a neighbor or friend. If you have any suggestions as to what you wish discussed, either contact Dr. Guilford C. Gross or me and I will pass the word on to him. Let's double our attendance this year.

Read in the Sioux Falls paper that Petter Bernhart has retired. Congratulations, Sir, and may your retirement be a pleasant one.

Al Knutson, President



SALARIES AND HOURS

The American Pharmaceutical Association recently conducted a "pilot" survey of employment conditions for the 1956 graduating class of pharmacists. The results appeared in an article entitled "Salaries and Hours and the Demand for Pharmacists" in the October 1956 issue of the Practical Pharmacy Edition of the Journal of the American Pharmaceutical Association. The facts brought out in this survey should be of interest to every pharmacist-owner or manager who will attempt to fill a position this year.

On a nation-wide basis the demand for 1956 graduates exceeded the supply in most fields of employment in our profession. The demand for graduates for positions in general-type pharmacies, hospital pharmacies, selling and in prescription-type pharmacies all exceeded the personnel available. Also of interest is the fact that all of those who replied to the survey were of the opinion that the over-all demand for pharmacists equaled or was greater than the demand in the previous year.

In South Dakota the demand for pharmacy graduates has exceeded the supply for many years with the graduate in some cases having as many as three or four positions offered. There are several reasons for this shortage not the least of which is the large percentage of graduates entering the military service through the draft or by means of reserve commissions. Another possibility is that in the surrounding states (in particular Minnesota, Iowa and Nebraska) pharmacy graduates are also in critical supply with the salaries offered for positions being generally somewhat higher than those in South Dakota.

The A.Ph.A. survey investigated salaries

and hours, also. In most instances the data obtained were estimated values. Generally the respondents were of the opinion that the average work week for 1956 graduates was 48 hours or less.

Concerning salaries, the survey showed that the average starting salaries of 1956 graduates in retail pharmacy covered a wide range from a low of \$60 a week to a high of \$150 per week. Of course, there is no doubt that internship requirements have a definite effect on starting salaries with those graduates who have become registered pharmacists naturally commanding the larger salary.

Of particular interest, however, is the fact that the most common value given for starting salaries was \$100 per week. The median or "average starting salary" based on the replies across the nation was \$90 per week.

Charles C. Rabe, Assistant to the Secretary of the American Pharmaceutical Association, pointed out in this article that the "profession of pharmacy is sorely in need of a comprehensive national survey designed to establish more precise facts regarding the demand for and the supply of pharmacists."

A study of our own state in regard to this situation might also be of interest and profitable.

THE SOUTH DAKOTA PRESCRIPTION SURVEY

From time to time there have been studies of prescription ingredients and pricing on a national basis. Also local surveys have been made in some states to determine various economic facts especially related to prescription service. However, as far as is known, no study has been made in South Dakota.

National figures can be used for generalization. However, there is the possibility that the economics of the pharmacies in the predominately rural areas found in this state may differ greatly from that of pharmacies primarily located in the larger cities of our nation.

For this reason selected pharmacists in South Dakota will be asked to cooperate in a statewide prescription ingredient survey during the next few months. Sponsored by the Division of Pharmacy, South Dakota State College, facts will be gathered by pharmacy students and alumni. It should be emphasized that the stores cooperating in this survey will not be identified in any manner and that only prescription files will be studied.

Preliminary plans call for a study of prescriptions dispensed by the cooperating stores during 1956 with regard to the following areas of interest:

1. Compounded or dispensed
2. Form of medication
3. Language used
4. Metrology
5. Prescriptions not refillable
6. Prescription Legend Drugs
7. Classification of drugs
(NF, USP or specialty)
8. Chemical form of drugs
(Inorganic, organic or vegetable drugs)
9. Pharmacological classification
10. Price

Also statistics relating to the "average" South Dakota drug store will be gathered. While these figures will be unreal, they provide a starting point from which the business of a particular prescription department may be compared. Also, the economic characteristics of South Dakota prescription departments may be compared with those of other areas of the country. Some of these facts to be studied are (1) average number of new and refill prescriptions per person per year, (2) average number of population per store, (3) average price or prescriptions, (4) average annual cost of new and refill prescriptions per person, (5) average number of new and refill prescriptions per year per pharmacy, (6) average new and refill prescription income per year per pharmacy, and (7) average

number of registered pharmacists per pharmacy.

Pharmacists who are willing to cooperate in this valuable study are asked to contact Dr. Harold S. Bailey, Division of Pharmacy, South Dakota State College, Brookings.

VETERINARY MEDICINE AND THE PHARMACIST—

(Continued from Page 67)

vaccination of these animals with hog cholera virus the trouble starts. Again, the use of a broad spectrum antibiotic would do much to remedy this situation.

Erysipelas

Erysipelas — also known as diamond skin disease in hogs — is another major disease problem in the swine industry, annually causing damage estimated at well over a million dollars. It has been known to wipe out 50% to 75% of a farmer's pig crop.

It is also becoming an increasingly serious and costly problem in the turkey industry, killing upwards of 25% of many infected flocks.

There are approximately 80 different strains of this bacterial organism and it will live for very long periods in the soil. Recent work has shown that adult animals may become carriers of the disease. In these cases the organism apparently does no damage or manifests itself in no fashion in the carrier.

In the past blood serum and living bacterial cultures have been used in an effort to provide immunization. Living bacterial cultures are very difficult to handle. They are potent substances and, of course, out in the field where refrigeration and handling are of paramount importance, it is difficult to insure the maintenance of measured potent cultures.

Within the last four years a new product-killed erysipelas bacterin has been placed on the market. This biological seems to be doing a very excellent job of immunization against the infection. Since it is a bacterin and is absorbed on aluminum hydroxide gel, local irritations may result if the product is not handled and administered properly.

PHARMACY *News*

PHARMACEUTICAL INSTITUTE APRIL 9-10

The annual refresher course for the practicing pharmacists of South Dakota, The Pharmaceutical Institute, will be held April 9-10, according to **Dr. G. C. Gross**, Chairman.

Sponsored by the Division of Pharmacy, South Dakota State College, in cooperation with the South Dakota State Pharmaceutical Association, the two-day program will be again held on the State College Campus. The program will include both the professional and economic areas of pharmacy and will feature speakers of national and local prominence in pharmacy and the allied sciences.

Registration will take place at 1:30 P.M. Tuesday, April 9 in the faculty lounge of the Union Building and the final session will be over by 4 P.M. Wednesday, April 11. The banquet is scheduled for Tuesday evening in the Memorial Union.

Further details will be announced in this Journal and each pharmacy in South Dakota will receive a copy of the complete program in March.

QUASSIA CUP NEEDED

Professor Kenneth Redman of the South Dakota State College Division of Pharmacy is looking for a Quassia Cup. Of historical interest in the teaching of pharmacognosy, the Quassia Cup is a scarce item since it is no longer of medicinal importance. Anyone who has information as to where the Division of Pharmacy can acquire one may contact **Dr. Redman** at the College.

"We are also interested in the collection of other items of historical interest," **Redman** said. "The 75th Anniversary of the South Dakota State Pharmaceutical Association will take place in a few years and we would like to prepare a history of South Dakota pharmacy for that occasion."

PHARMASCOOPS

Petter Bernhart, 86, retired January 5 after 53 years in the practice of pharmacy in South Dakota. He recently sold his business, The Reliable Drug Store, on South Phillips Avenue, Sioux Falls.

Born in Norway, **Bernhart** received his education in pharmacy at the University of Oslo in that country. He holds certificate number 1118

as a registered pharmacist in South Dakota.

Coming to the United States in 1903, **Mr. Bernhart** first held a position as a pharmacist in Watertown. In 1905 he moved to Sioux Falls and purchased a partnership in a store on North Phillips Avenue. In 1907 he bought out his partner and in 1939 moved to the present location of his business opposite the postoffice.

Alice Mills, SDSC 1954, is spending the winter with her parents in Tallahassee, Florida. Her father is Professor of Mathematics at the University of Florida. Since graduation, **Miss Mills** has held a position as pharmacist with the Sioux Valley Hospital Pharmacy.

John Borchert, SDSC 1956, accepted a position as pharmacist with the Lehr Drug, Rapid City, in December. Since graduation **Mr. Borchert** had been employed by the Division of Pharmacy, South Dakota State College, as an Assistant in the Department of Pharmaceutical Chemistry.

Lt. Ron Rames, SDSC 1956, is presently stationed at Fort Leonard Wood, Missouri. Upon completion of his Medical Service Corps indoctrination he expects to be assigned to a post overseas.



RETROPERITONEAL RUPTURE OF THE DUODENUM DUE TO NONPENETRATING ABDOMINAL TRAUMA

Presentation of a Case and Review
of the Literature
Captain John J. Stransky, Medical Corps,
United States Air Force*

Retroperitoneal rupture of the duodenum as a result of nonpenetrating abdominal trauma is an injury which occurs rarely. This injury carries a mortality of from 20 to 50 per cent although recent articles^{1, 2} emphasize the fact that accurate diagnosis and early treatment will reduce the mortality almost to 0. A recent opportunity to treat such an injury successfully, coupled with the marked discrepancy between the actual and the attainable mortality in this condition, prompts this review of the subject.

CASE REPORT

K. R. A. (No. 10,898), a 29-year-old white airman, was admitted to Shaw Air Force Base Hospital, South Carolina, on April 15, 1953, following an automobile accident. He was under the influence of alcohol at the time of admission, and the history was very incomplete. Details made available during post-operative convalescence revealed that the patient was thrown against the steering wheel of his automobile at the time of the accident and that he was unconscious for a short period of time. Examination on admission was negative except for multiple contusions and abrasions about the face and knees.

I first saw the patient some ten hours after admission. At this time he complained of abdominal pain and difficulty in breathing.

The abdominal pain was steady, moderately severe, and present in both lower quadrants, but most marked on the right side. The difficult breathing was attributable to right anterior chest pain, which was accentuated with chest motion. Examination was negative except for the chest, abdomen, and vital signs. The temperature was 100.4°, the pulse 124, and respirations 20. There was tenderness over the third and fourth right ribs anteriorly. Abdominal examination revealed moderate spasm of both recti in the lower quadrants, most marked on the right. There was associated tenderness without rebound in the right lower quadrant. Auscultation revealed hypoactive bowel sounds.

The white blood cell count was 23,700. Urinalysis was negative. Skull films were negative. The chest roentgenogram revealed a fracture of the right fourth rib anteriorly, and the presence of air beneath the right diaphragm. Scout films of the abdomen showed air retroperitoneally in the right perirenal area, sharply outlining the right kidney and having a characteristic alveolar pattern. During the period of radiologic examination, the patient had two episodes of hematemesis and shortly thereafter went into shock. He was immediately given intravenous fluids and whole blood, and prepared for surgery.

Exploratory laparotomy was performed under nitrous oxide, oxygen, and ether anesthesia, with succinylcholine chloride being employed for adequate muscular relaxation.

* Present address: Watertown, S. D.

* Reprinted from Surgery, Vol. 35, No. 6, pages 928-936, June, 1954.

The abdomen was entered through a right paraumbilical, paramedial incision. In freeing the right rectus muscle from its fascia, a 3 by 3 cm. area of muscle contusion and softening was noted in the superior pole of the wound. A moderate amount of serosanguineous fluid was present in the abdominal cavity. Systematic examination of the abdominal viscera was negative except for these findings: (1) a 10 by 10 cm. hematoma in the ascending mesocolon, (2) a 1 by 2 cm. area of fat necrosis on the posterior parietal peritoneum in the angle formed by the medial border of the cecum and the inferior segment of the root of the small bowel mesentery, (3) multiple serosal tears in the ascending colon, and (4) emphysema and crepitation in the retroperitoneal tissues overlying the right kidney. The entire right retroperitoneal space was exposed by incising the peritoneum on the lateral border of the ascending colon and displacing the ascending colon and its mesocolon medially. The retroperitoneal tissues immediately inferior to the duodenum were bile stained. Examination of the duodenum revealed a transverse tear in the third portion of the duodenum at the point where it crosses the vertebral column.

The tear was 3 cm. in length and extended about one-half the circumference of the duodenum on its anterior-inferior surface. The tear was closed in two layers using a continuous inverting stitch of 000 catgut (Connell stitch) for the first layer and reinforcing this with a second layer of interrupted silk Lembert stitches. A Penrose drain was placed in the retroperitoneal space and brought out through a right flank stab wound. The hematoma was then evacuated from the ascending mesocolon, and the serosal tears were repaired. The colon was replaced in its anatomic position, and a layer closure of the abdominal incision was then effected. The patient received 1,000 c.c. of whole blood during the operation.

Postoperatively, the patient was treated with continuous nasogastric suction, intravenous fluids, and parenteral streptomycin and Terramycin. Oral fluids were started on the third postoperative day. Removal of the retroperitoneal drain was begun on the seventh postoperative day and completed on the thirteenth. On the ninth postoperative day, a partial disruption of the abdominal wound

occurred. This involved the skin, subcutaneous tissues, and the anterior fascial layer; the posterior fascia and peritoneum were intact. The wound disruption was repaired under local anesthesia (bilateral intercostal nerve block with Novocain), effective closure being secured with interrupted through-and-through wire sutures.

Gastrointestinal study three and one-half weeks after operation showed a normal duodenum without evidence of constriction at the operative site. The patient was discharged from the hospital at this time and returned to full military duty following two weeks of convalescent leave.

INCIDENCE

Subcutaneous rupture of the intestine without penetrating injury occurs not infrequently, but duodenal involvement is rather uncommon. Siler¹ cited a review of 1,183 cases of subcutaneous rupture of the intestine in which 113 or approximately 10 per cent involved the duodenum. Maingot³ stated that only 30 per cent of the duodenal ruptures involve the retroperitoneal portion of the duodenum. Johnson⁴ reviewed the world literature from 1916 to 1944 and was able to find only fifty-two bona fide cases of retroperitoneal rupture of the duodenum. Of these patients, twenty-six survived. Also of interest is the fact that in seven of the fifty-two cases, the lesion was not discovered at the time of surgery. Cohn² has tabulated the cases reported from 1944 to 1952, but some of the twenty-five cases which he listed do not involve the retroperitoneal portion of the duodenum (Siler, Case IV).

ETIOLOGY

Subcutaneous traumatic rupture of the duodenum is usually the result of blunt trauma to the abdominal wall but may also occur following blast, crushing, or run-over accidents. One of the more common mechanisms of injury is seen in automobile accidents. With rapid deceleration, the driver is forcefully thrown forward against the steering wheel, thus causing impingement of the duodenum against the vertebral column.

MORTALITY

The case mortality rate has shown a progressive decrease over the years. Schumacher⁵ in 1910 and Miller⁶ in 1916 presented forty-six cases of retroperitoneal duodenal rupture with a mortality of 89 per cent.

In the most recent series of cases reported,² the mortality rate was 20 per cent. Moreover, in this series there were no fatalities in the sixteen patients operated on between 1947 and 1952.

DIAGNOSIS

Signs and Symptoms.—When retroperitoneal rupture of the duodenum occurs as an isolated injury, the diagnosis can often be suspected from the history alone. Following abdominal injury there is a period of several hours during which the patient is asymptomatic. This asymptomatic phase is due to the fact that following the injury some time must elapse before sufficient duodenal contents spill into the retroperitoneal tissues to cause symptoms.

Abdominal pain begins when sufficient duodenal leakage has occurred. This pain is steady, severe, and becomes progressively more intense. It may be localized in the right upper quadrant, in the right lumbar back area, or in the right lower quadrant.

Nausea and vomiting may or may not occur after the onset of the pain. At times, the vomitus may contain blood, although this is not a constant finding.

Irritation of the retroperitoneal tissues may include the testicular nerves, and when this occurs, testicular pain results. Testicular pain as a symptom of retroperitoneal duodenal rupture was first described by Butler and Carlson.⁷ This does not appear to be a common finding, however.

Abdominal tenderness and associated muscle rigidity are usually present and follow the course of the pain. Abdominal auscultation reveals hypoactive or completely absent bowel sounds. If the retroperitoneal escape of air from the duodenal rupture has been sufficient, emphysema and crepitation of the pelvic tissues can be detected on rectal examination.

Shock may be present and is due to the original trauma, to the leakage of duodenal contents into the retroperitoneal tissues, or to blood loss secondary to the duodenal rupture.

Laboratory Findings.—Leukocytosis is present and may vary from 10,000 to 40,000. The hemoglobin and red blood cell count are helpful in determining the amount of blood loss.

The serum amylase may be elevated as a result of traumatic pancreatitis; a moderate

elevation of the serum amylase may also occur as a result of the spillage of duodenal contents retroperitoneally.

Roentgenographic Findings.—Radiologic examination of the abdomen and gastrointestinal tract is of great help in establishing a diagnosis of duodenal rupture.

Scout films of the abdomen may reveal the presence of a pneumoperitoneum. While this ordinarily suggests the rupture of an intraperitoneal hollow viscus, it may also be seen with retroperitoneal duodenal rupture. A more constant finding, as first pointed out by Sperling and Rigler,⁸ is the collection of air about the right kidney and adjacent retroperitoneal tissues.

There is no unanimity of thought regarding the use of barium or Lipiodol to demonstrate duodenal rupture. Siler¹ recommended the use of barium whenever the diagnosis is in doubt.

TREATMENT

Preoperative.—In the usual case of retroperitoneal duodenal rupture, the diagnosis will not be made immediately upon admission. Radiologic studies and repeated clinical observation are required, and these take time. During this period of diagnostic work-up and observation, the patient should be at bed rest and should receive nothing by mouth. Whole blood should be available and given as indicated. Water and electrolyte balance should be maintained by parenteral administration. Continuous nasogastric suction should be instituted. Once the diagnosis has been established, operative treatment is accomplished.

Operative.—Abdominal exploration must be thorough since multiple injuries may be present. It must be remembered that there may be no intraperitoneal evidence of the retroperitoneal rupture. The following signs have been reported as suggestive of retroperitoneal duodenal rupture: (1) hematoma or bile extravasation in the ascending or transverse mesocolon, or in the retroperitoneal tissues, (2) fat necrosis of the posterior parietal peritoneum or in the ascending or transverse mesocolon, (3) crepitation or emphysema of the retroperitoneal tissue, especially in the region of the right kidney.

When any of these findings suggest duodenal exploration, the remainder of the intraperitoneal exploration should be completed first, and any lesions thus found should be

treated. The duodenum should then be exposed and carefully examined. In lesions involving the second portion of the duodenum, this may easily be accomplished by dividing the posterior parietal peritoneum along the lateral border of the duodenum and then displacing the duodenum to the left. In those cases involving the third and fourth portions of the duodenum, and in those cases in which the exact nature and extent of the retroperitoneal injury is not immediately apparent, greater exposure seems desirable. Complete exposure of the right retroperitoneal space, including the entire retroperitoneal portion of the duodenum, is easily obtained by incision of the peritoneum on the lateral border of the ascending colon and displacement of the colon and its mesocolon medially.

The local treatment of the duodenum will depend on the nature and extent of the perforation. Whenever feasible, simple suture of the perforation should be accomplished. Such closure is best obtained with a Connell type inner layer closure with catgut, reinforced with an outer layer of nonabsorbable Lembert or Halsted sutures. When such closure would result in stricture at the site of repair, the choice of treatment lies between the following: (1) complete division of the duodenum with end-to-end anastomosis, (2) complete division of the duodenum, closure of both ends, and gastrojejunostomy, (3) division of the duodenum, closure of the distal duodenal stump, and duodenojejunostomy.

Drainage of the retroperitoneal space is mandatory and is best accomplished through a stab wound in the right flank.

Postoperative. — Treatment here is similar to that following any major gastrointestinal surgery. Water and electrolyte balance are maintained by parenteral administration.

Continuous nasogastric suction is employed until the return of normal peristalsis is apparent. Parenteral streptomycin and Terra-

mycin are used for such time as is indicated by the clinical course.

The most commonly encountered complications following retroperitoneal duodenal rupture are peritonitis and retroperitoneal cellulitis. Other complications include duodenal fistula, pancreatic fistula, subphrenic and subhepatic abscess.

SUMMARY

1. Retroperitoneal rupture of the duodenum due to nonpenetrating abdominal trauma is an injury which occurs rarely. The mortality rate is high unless accurate diagnosis and early surgical treatment are accomplished.

2. Diagnosis is based on an accurate history, repeated clinical observation, and radiologic findings. There are no constantly present pathognomonic signs or symptoms in this type of injury.

3. At laparotomy, there may be no intraperitoneal evidence to indicate the retroperitoneal pathology. However, there are findings which when present are indicative of retroperitoneal pathology.

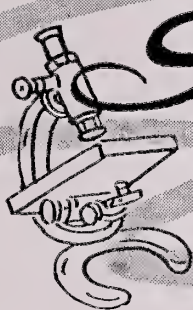
4. The method of treatment of the duodenal rupture is dictated by the extent of the injury. Intestinal continuity should be re-established by the simplest procedure possible. In the majority of cases, this can be accomplished by transverse closure of the duodenal tear.

5. Drainage of the retroperitoneal space is mandatory.

6. Postoperative treatment is similar to that employed following any major gastrointestinal surgery.

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Scientific PAPER

HEREDITARY SPHEROCYTOSIS A Case Report With Fourteen Splenectomies In the Same Family* W. F. Stanage, M.D. Department of Pediatrics Yankton Clinic Yankton, S. Dak.

This paper is a report of a family in which 14 members have had splenectomies because of hereditary spherocytosis. Hereditary spherocytosis is manifest by an abnormal spheroid red blood cell, the spherocyte. There is an excessive destruction of this abnormally shaped cell with a resulting anemia and occasionally jaundice.

Hereditary spherocytosis is also known as congenital hemolytic jaundice, congenital hemolytic anemia, spherocytic anemia, chronic acholuric jaundice and chronic familial jaundice.

The morphologic trait is inherited as a Mendelian dominant and may be transmitted by either parent. As a result, the offspring of those who exhibit this disease have a 50% chance of having spherocytosis. On the other hand, the children of those who do not inherit the disease will be free of the condition. Males and females are equally effected.

The usual presenting clinical picture is that of pallor and less commonly jaundice. The major laboratory findings are those of anemia, spherocytosis, reticulocytosis and increased osmotic fragility of the red blood cells.

The disease may be punctuated by episodes of hemolytic crises. These are manifest by fever, abdominal pain, pallor, jaundice and enlarged spleen. Acute crisis may occur at any age.

The disease is usually one of young adults, however it may be evident at birth. Complete spontaneous remission is very common once symptoms appear.¹

Splenectomy is the treatment of choice. The abnormal red blood cell persists after splenectomy but the anemia and hemolytic crises disappear. Gross² reports only one case in a total of 59 splenectomies in which there was a continuation of the hemolytic crises, but these were less frequent and less severe than before the splenectomy.

Prognosis without splenectomy is usually related to the age at when symptoms develop. Cases developing in late childhood or early adulthood may have but slight disability, however those developing in infancy tend to be more fulminating.

This female infant was born following an uneventful pregnancy and delivery. There were two normal siblings, 2 and 3 years of age.

Birth weight was 9 lbs. 2 oz. Physical examination at birth was normal. The infant was seen at one and two months of age for routine care and was found to be normal. The infant was seen at 11 weeks for the third routine visit. At that time it was noted the infant showed slight pallor, questionable jaundice and a palpable spleen. The initial laboratory work-up at 11 weeks revealed a hemoglobin of 7.5 gms., RBC 2.76, hematocrit 32 vol. %, and platelets 248,000. Many spherocytes were also seen in the blood smear. There was also a marked family history of

* Presented at the Annual Meeting of The Society of Internal Medicine, Vermillion, September 29, 1956.

congenital spherocytic anemia, with 13 known splenectomies. The maternal great grandfather may have had the disease but this is not known with certainty. (Fig. 1)

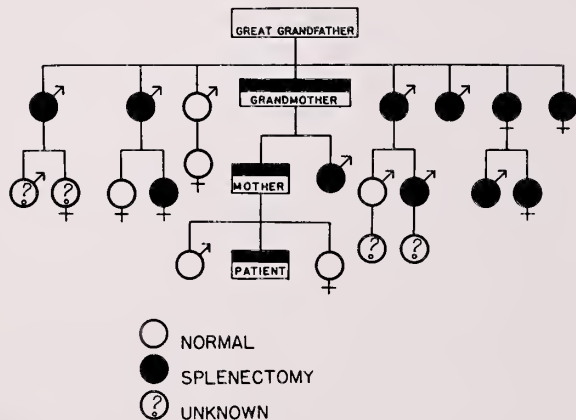


Fig. I

The baby showed good weight gain, was active, alert and ate well. The baby showed no disability and was normal except for the pallor. At 18 weeks of age a complete blood laboratory work-up revealed a 9 gm. hemoglobin, 3.45 RBC, 27% hematocrit, 13,500 WBC, 79% lymphocytes, 17% polymorphonuclear cells and 1% monocytes. There was marked anisocytosis and spherocytosis. The reticulocyte count was 9.1%. Serum bilirubin was 0.4 mg. %. Red blood cell fragility revealed partial hemolysis at 0.5% and complete hemolysis at 0.4%. The direct Coombs test was negative. The baby was blood type A, Rh/-. A bone marrow aspiration was done but no cellular elements were obtained.

At 5 months of age the spleen again became palpable, 3 cm. below the midcostal line, and jaundice returned. There was no essential change in the blood counts.

A splenectomy was performed at 6 months of age. At operation a small accessory spleen was found extending from the gastrocolic omentum on a long pedicle. The pathological report showed passive hyperemia of the spleen. The operative course was uneventful. The infant received intravenous infusions of electrolyte and glucose solutions but no blood. The post-operative hemoglobin and red count showed a substantial increase and there was no essential change in the platelet count. (Fig. 2)

	HGB	RBC	PLATELETS
PRE			
SPLENECTOMY	8.5	2.9	252,000
POST			
SPLENECTOMY			
4 HRS	9.5	3.7	325,600
24 HRS	11.0	4.2	352,800
48 HRS	11.0	3.7	292,000
5 DAYS	10.0	3.8	311,000

Fig. II

The post surgical course has been uneventful. At 9 months of age the baby weighed 21 lbs. 12 oz. Physical examination was negative except for a surgical scar in the left upper quadrant. The hemoglobin at 36 weeks was 12 gms., RBC 5.19 and reticulocyte count 0.3%. (Fig. 3)

AGE(WKS)	HGB	RBC	RETIC.
11	7.5	2.76	
14	8.0	3.26	4.0%
22	8.5	2.84	
AFTER SPLENECTOMY			
25	10.5	4.17	2.0%
36	12.0	5.19	0.3%

Fig. III

(Continued on Page 92)



THE MANAGEMENT OF PEPTIC ULCER

By

Walter L. Palmer, M.D.*

Chicago, Illinois

The first problem in the management of peptic ulcer is the establishment of the correct diagnosis. The importance of the history has long been emphasized. The essential features of ulcer distress are chronicity, periodicity, relationship to food taking, and relief of the pain by food, antacids, emesis or by rest. Pain in the morning before breakfast is rarely, if ever, attributable to peptic ulcer. The morning pain is rarely as severe as the afternoon or evening pain. Nocturnal pain occurring between midnight and 2:00 or 3:00 A.M., while not pathognomonic of peptic ulcer, is highly suggestive. A history of black stools indicating hemorrhage, or of acute perforation further corroborates the diagnosis. In the last thirty years the x-ray examination of the upper digestive tract has become so universal, so available and so reliable that now one is reluctant to make a diagnosis of peptic ulcer without roentgenologic evidence. In medicine, however, nothing is infallible and hence there are errors, both positive and negative, in the interpretations of the roentgenologic signs. Functional disturbances of the digestive tract not infrequently simulate peptic ulcer. No harm is done if these functional disorders are treated medically as though they were attributable to ulcer, but when radical procedures are instituted, such as surgery, when no ulcer exists, a great deal of harm may be done.

Two other simple routine procedures not pathognomonic for ulcer, but, nevertheless,

valuable are gastric analysis and examination of the feces for occult blood. The demonstration of occult blood makes it mandatory for the physician to locate the source of the bleeding. The percentage of patients with peptic ulcer who have occult blood in the feces is relatively small, but the information is worthwhile.

Gastric analysis has been both used and abused for many years. We have found it most helpful even though it is not possible to state that any given curve is pathognomonic of a given disease. We prefer the test performed in the morning in the fasting stomach and consisting simply of emptying the stomach for four 15 minute intervals to determine the volume and the free acidity in each specimen. Following this, an injection of histalog is given subcutaneously and the stomach aspirated at fifteen minute intervals for a second hour. In patients with duodenal ulcer free acid is usually present in all of the fasting specimens, with a rise to approximately 100 clinical units after the injection of histalog. In patients with gastric ulcer, this high secretory pattern may be seen, but more frequently there is an absence of free acid in several of the fasting specimens and a rise of variable magnitude after the injection of histalog. In patients with gastric cancer similar secretory patterns may be seen. In normal individuals the gastric secretory rate may be high or low. The important points are first that in duodenal ulcer a high secretory pattern is almost invariably present and second that in gastric ulcer some free acid is present.¹

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The x-ray examination is important not only as a means of confirming the diagnosis of peptic ulcer, but also as a means of locating the site. If the lesion is gastric, the problem of the differentiation of benign and malignant ulcer as ever present. If the ulcer is beyond the pylorus in the duodenal bulb or in the second portion of the duodenum, neoplasm occurs so rarely that for practical purposes it may be forgotten. The x-ray study also suggests the amount of stenosis present as indicated by the narrowing of the channel and the amount of fluid in the stomach at the time the barium is given. These considerations do have some bearing upon the question whether the patient should be treated medically or surgically.

In the treatment of the patient with peptic ulcer, much depends upon the personality of the patient, the personality of the physician and the relationship between the two. The physician must understand the patient and his problems. The patient must understand the nature of his disease and the general principles of therapy. Mutual understanding of this sort will eliminate many of the so-called intractable cases.

The specific problems of therapy are the promotion of healing and the prevention of recurrence. There is now abundant evidence that peptic ulcer is the result of acid pepsin digestion of the mucosal cells. In therapy, we are concerned therefore with measures to promote mucosal resistance and with measures to decrease the acid attack. Unfortunately, little is known about mucosal resistance or the manner in which it can be improved. We do not know why the normal stomach resists digestion although there is much reason to think that the mucosa is protected by a layer of mucus constantly being secreted by the mucous glands. Similarly we do not know why in peptic ulcer this defense mechanism breaks down at a given point and peptic ulceration results. We do know that acid gastric juice is essential for the formation and persistence of a chronic peptic ulcer, that chronic ulcers do not occur, or at least do not persist, in achlorhydric stomachs. In our experience, whenever we have been able to induce an achlorhydria lasting three months or longer, the ulcers have healed and remained healed for the duration of the achlorhydria.

In general, two points are clear with res-

pect to the relationship between ulcer and acid gastric juice. The first is that the gastric secretion in patients with duodenal ulcer is several times that of normal individuals whereas the fasting secretion in patients with gastric ulcer is not excessive.² (See Table I)

TABLE I.
AVERAGE TWELVE HOUR NOCTURNAL
GASTRIC SECRETION

	Vol. (ml.)	Free HCl (c.u.)	Output HCl (mg.)	mEq.
Normal	581	29	661	18.1
Duodenal ulcer	1,004	61	2,242	61.6
Gastric ulcer	600	21	454	12.5

These observations suggest that in duodenal ulcer, the excessive secretion of acid gastric juice may be sufficient to break down the mucosal barrier whereas in gastric ulcer with the normal secretory pattern some change in the mucosa itself may decrease its resistance to digestion.

Dragstedt³ has shown that the hyper-secretion in patients with duodenal ulcer is clearly of vagal origin, but there is no evidence as to the cause of this hyperactivity. The role of the gastric antrum is still obscure. The recent work of Zollinger and Ellison⁴ suggests that in certain individuals delta cell tumors of the pancreas may evoke gastric hypersecretion.

To return now to the clinical problem of treatment, it may be well to point out first the old observation that physical and mental rest are of great importance. Presumably rest facilitates the healing process in the mucosa. It may also decrease the secretory rate. It is true that many patients with ulcer recover spontaneously and that many can be treated satisfactorily without hospitalization or bed rest. Experience has proved, however, that in the more severe instances when troublesome pain or bleeding is present or when a crater can be demonstrated by x-ray, it is wiser to put the patient at rest in bed at home or in the hospital and to provide frequent feedings of soft food, preferably high in protein content. The protein neutralizes the acid. We prefer the old regimen of Sippy,⁵ using three ounces, 90 cc, of half milk and half cream or of whole milk every hour from 7:00 A.M. to 7:00 P.M., occasionally continuing the milk at two hour intervals through the night.

We also like the regular use of an antacid such as calcium carbonate given in doses of 2 grams, 60 grains, every hour from 7:30 A.M. to 7:30 P.M., and at half-hourly or hourly intervals until bed time. Exact amounts of antacid and the method of administration may be varied, but the goal is to neutralize the free acidity of the stomach and hence inhibit the peptic attack for as many hours of the day and night as may be practicable. Such a procedure should invariably relieve the pain within a few hours and be followed by a gradual healing of the ulcer and the disappearance of occult blood in the feces. Soft nutritious foods in small amounts two to six times daily or in larger feedings three times a day may be added as rapidly as conditions warrant. It must be borne in mind that calcium carbonate is constipating to most people and magnesium carbonate laxative. Hence the respective amounts of these preparations must be adjusted to the individual patient.

The time honored antispasmodic is belladonna. While the role of spasm in peptic ulcer is questionable, belladonna is an antispasmodic and antisecretory drug. Combined with phenobarbital it does seem to be of help in many patients. The newer anticholinergic drugs,⁶ such as Pamine and Pro-Banthine exert a moderate inhibitory effect upon gastric secretion and gastric emptying. Unfortunately, the side effects such as dryness of the mouth and blurring of the vision prevent their use in full dosage. They are definitely contraindicated when pyloric obstruction is present or in patients with prostatic obstruction or glaucoma.

Since 1937 we have been studying the effect of roentgen irradiation upon the stomach.^{7, 8, 9} It has been shown that in moderate doses, that is in total depth doses of 1600 or 1700 roentgens, a variable depression of gastric secretion occurs — variable in amount and variable in duration. It has been sufficient, however, over the years to constitute, in our judgment, a significant addition to our program of medical management. Perhaps the most important point to make is the one mentioned earlier that when an achlorhydria lasting for three months or longer developed the ulcers invariably healed and did not recur during the period of achlorhydria. Achlorhydria was observed in 40 of 116 patients with gastric ulcer so treated. The in-

cidence of induced achlorhydria in patients with duodenal ulcer was much lower but nevertheless the same observations held. It is of interest to note that with this procedure of medical management and radiation therapy the number of attacks of ulcer distress were reduced from a figure of 102 per 100 patient years prior to therapy to 17 after therapy. Similarly the incidence of hemorrhage was reduced from 4.3 per 100 patient years to 1.1 after therapy. (See Table II)

TABLE II

DUODENAL ULCER

Patients Treated 1939 to 1950

Follow-up January 1956

Medical Treatment Including Roentgen Irradiation
Episodes per 100 Patient Years

	Before Treatment	After Treatment
Pain	102	17
Hemorrhage	4.3	1.1
Acute Perforation	0.2	0.1

Gastric ulcer differs from duodenal ulcer in that the possibility of cancer is always present. Some surgeons and internists consider this possibility to be sufficiently great to warrant resection of all gastric ulcers. Our policy for the past 25 years has not been that because we think that we can differentiate the two lesions with a reasonable accuracy. In 121 cases reported in 1954 the diagnostic error was 4.1 per cent. It is true, however, that if the clinician has serious doubts as to the nature of the lesion, surgery should be advised. Certainly a gastric ulcer occurring in the presence of complete anacidity should be resected. Many benign ulcers occur on the greater curvature but, nevertheless, ulcers on the greater curvature should be resected. There are numerous roentgenologic and gastroscopic criteria of malignancy such as Carman's meniscus sign and failure of the crater to heal or decrease markedly in size in three or four weeks of careful management. The demonstration of cancer cells in the gastric content may provide conclusive evidence that the lesion is malignant. Under such circumstances, resection should certainly be recommended. Medical management may be maintained only if there is no evidence of malignancy and if the course of the lesion is entirely compatible with benignancy. The symptoms and the occult blood should disappear promptly. The crater should decrease markedly in three or four weeks. Infiltration of

the gastric wall, if present, should disappear and the mucosal folds, if seen, should radiate to the central point of the healing ulcer.

There has been great controversy in the last decade over the relative merits of partial gastrectomy and of posterior gastroenterostomy combined with vagotomy in the surgical treatment of duodenal ulcer. Our own preference for gastroenterostomy and vagotomy is based on several reasons.¹⁰ The mortality averages less than half of one per cent. The morbidity is less than that of resection in that the incidence and the severity of the dumping syndrome is less. Postoperative diarrheas occur less frequently and are less severe. Recurrent ulcers seem to us to occur no more frequently with this procedure than they do following partial gastrectomy and they are much easier to handle when they do occur. With a gastroenterostomy "the bridges are not burned behind"; one can undo the gastroenterostomy, perform a second gastroenterostomy or, as a last resort, proceed with partial gastrectomy if it proves necessary.

There are a certain number of failures after all methods of treatment. These patients are the truly intractable and difficult ones. The failures, if due to recurrent ulcer, are invariably associated with continued presence of acid gastric juice. Failures not due to recurrent ulcer, but to a postoperative state of one kind or another, may be most difficult to manage physiologically or psychologically.

Separate mention may be made of the treatment of patients with massive hemorrhage. Certainly with rest, reassurance, sedation and a frequent feeding, antacid program the vast majority of patients rally quickly and the bleeding ceases. In a rather small percentage the bleeding reaches alarming proportions with shock, fast pulse and a rapid drop in the hemoglobin, hematocrit, red blood cell count and circulating blood volume. There has been some controversy as to whether these individuals should receive transfusions or not. In our experience transfusions are indicated when the hemorrhage is severe, but the transfusions should be given cautiously and slowly. If several transfusions are required within a twenty-four hour period to maintain the hemoglobin at a reasonable level, or more particularly, if several transfusions fail to maintain the hemoglobin at a satisfactory level, an emergency laparotomy may be necessary. The procedure should be

avoided if possible because of the likelihood that the bleeding will cease without operation and also because, in many instances, it is extremely difficult, if not impossible, for the surgeon to identify the bleeding point at operation. Under such circumstances a so-called blind resection may become the necessary procedure. It is much better, however, for the surgeon to find the bleeding point, if he can do so, and ligate the bleeding vessel. Resection is a frequent, necessary part of this procedure.

CONCLUSIONS

1. Peptic ulcer is primarily a medical problem. The lesion arises from the inability of the mucosa to resist the acid attack.

2. Medical treatment requires patience and perseverance. It is based upon a program of co-operation between the patient and the physician, upon rest and upon a frequent feeding, antacid regimen. Antisecretory drugs and radiation therapy directed at the acid secreting portions of the stomach may be very helpful adjuncts to the therapeutic program.

3. Surgery is required for acute perforation, for gastric ulcers thought to be carcinomatous and for duodenal ulcers producing obstruction. The preferred type of surgery in gastric ulcer is subtotal resection whereas in duodenal ulcer vagotomy and posterior gastroenterostomy receive first choice.

4. The treatment of massive hemorrhage is likewise medical unless the patient fails to withstand the so-called "test of transfusion," in which case surgery may be unavoidable.

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THE HISTORY OF THE SOUTH DAKOTA STATE MEDICAL ASSOCIATION

(Continued from February)

Clark J. Pahlas
Pierre, S. D.

(Continued from February)

MEDICAL DEFENSE

It was for this self-protection that the association in 1916 created a Committee on Medical Defense. This action grew from the feeling among its members that some type of insurance was desired to protect them in law suits arising from their practice. Two years later a questionnaire was sent out by the association, and responses were received from forty state medical associations. The questionnaire revealed that twenty-four of these associations had some type of medical defense protection for its members. Of these twenty-four, only one state, Wisconsin, had plans for dropping its program.⁶⁸ It was found that the special dues paid by association members for their protection varied from twenty-one cents per capita in Massachusetts in 1917 to five dollars in Arizona for the same year.⁶⁹

There were two possible plans for establishing a medical defense program: that of enlisting the services of a permanently established concern handling insurance of this character or that of creating a committee within the state association itself which would be responsible for making proper arrangements for counsel and defense. It was estimated that under the first plan the South Dakota Medical Association would have to levy a two-dollar assessment on each member every year. This fee would have created a fund to pay the actual expenses of litigation and maintenance of records.

The Committee on Medical Defense felt that it was an inopportune time to initiate a

medical defense program because the "Great War" had already placed an extra heavy burden on the physicians of the state.⁷⁰ The committee, therefore, recommended that the association forestall any action on establishing a medical defense policy until it could devote efficient time and energy to it to guarantee success.

However, establishing a medical defense policy was left to the discretion of the association. Disregarding the committee's suggestion, the association entered into a contract with the United States Fidelity and Guaranty Company of Baltimore, Maryland.⁷¹

Participation in the defense program was to be the free decision of the individual members and was not compulsory. Rates were determined by the number of physicians participating and the amount of liability coverage desired. It was recorded that by 1928 there were some fifty-five South Dakota doctors individually protected.⁷² That same year the association obtained a group policy for professional liability insurance with limits of \$10,000 to \$30,000 at an annual premium rate of \$25.00 per member participating.⁷³ —

With the adopting of this Group Physicians Liability Defense Policy (made with the United States Fidelity and Guaranty Company) a master policy was deposited with the secretary of the association. Individual certificates were mailed to those members who took advantage of the pro rata cancellation of their old individual policies and to those who applied for the certificates when their policies expired with other companies.

During the "Great War" the State Medical

68. The Wisconsin Medical Association had won practically all of its cases, but it had been subject to some criticism for having defended some persons who were in the wrong.

69. The Massachusetts Association had 3,600 members, while Arizona had only 200. The questionnaires revealed that court costs were very seldom paid by the associations, because the claims were usually without merit, "and conceived in the spirit of blackmail." Information on these questionnaires is available in *South Dakota Medical Society*, Proceedings of the House of Delegates, 1918, annual session.

70. Fourteen per cent of South Dakota's physicians were in the armed forces at the time. Taken from the minutes of the 1917 annual session.

71. *South Dakota Medical Society*, 1914-1919. Taken from the Proceedings of the House of Delegates, 1917 annual session.

72. *Journal Lancet*, XLVIII (October 1, 1928), 448.

73. *Loc. cit.* It was stipulated by the company that a minimum of 50 physicians must participate to put the policy in force.

Association carried on in traditional style, enlisting its skill in whatever capacity it could be of service. The following report given at the annual session in 1919, in recognition of the part played by association members in the war effort, indicates the record.

You all know full well what has been accomplished by the medical profession of the state of South Dakota in sustaining the Surgeon Generals Office in all the medical war activities in which we have been called upon to assist. Nearly two hundred of the best men in the medical profession of the state have cheerfully answered the call, given up large, lucrative practices, accepted commissions, and responded to their orders. Nearly five hundred physicians in this state, in one way or another, have been connected with war work, either in the Medical Corps, U.S.A., or attached to some one of the various local and medical advisory boards under direction of the provost Marshal General's Office. The State of South Dakota has reason to be proud of the record of its medical men in the Great War for the preservation of the World's Democracy.⁷⁴

The State Medical Association also benefited from this work accomplished in the name of defense. "Men from all over the country met in training-camps and hospitals to receive instruction at the hands of eminent teachers. They acquired ideals of service, such as never before had been possible." The return of these men to the ranks of private practice produced a "leavening effect upon the whole profession."⁷⁵

"The War to End All War" was over; the eras of prosperity and depression were yet to come. Looking backward over nearly forty years of medical service, the South Dakota Medical Association was credited by one of its members with having "... the best there is in medicine and the best there is in those who practice the profession." The value of those forty years was summed up in the president's annual address of 1919: "We can learn

only by association the good there is in each other. In this way alone can we maintain the ideals of service and of ethical conduct which are the glory of organized medicine."⁷⁶

CHAPTER II

THE ASSOCIATION AND THE PRACTICE OF MEDICINE, 1920-1956

It has been shown that the South Dakota State Medical Association attempted to act as a unifying force behind professionalism. This interest in maintaining high (state) standards within the medical profession during the association's early period of growth aided in such legislative successes as the creation of territorial and county boards of health in 1885 and the establishment of a board of medical examiners in 1903. However, the unification of the medical profession in South Dakota through the auspices of the State Medical Association was difficult because it (the association) did not fully represent the profession in the state. The association had a membership of 327 physicians in the year of 1924-25. However, there were about 250 more licensed physicians in the state who were not members of the association; this made the task of controlling professionalism a difficult one. In addition, although many of the district medical societies gained in membership, they did not participate in the programs of the state association with the interest necessary to promote a strong organization.

This lack of participation was referred to at the annual session of the House of Delegates in 1925. It was revealed that there had been practically no increase in the membership of the South Dakota State Medical Association during the 1920's and that "... only a small percentage of the men in the state attended the annual meetings."¹

The association, to represent the profession, had to form itself into a strong organization. A physician at the 1925 annual session, speak-

74. **South Dakota Medical Society**, 1914-1919. Proceedings of the House of Delegates and Report of the Medical Corps Committee, 1919, annual session.

75. *Ibid.* Taken from the President's Annual Address, 1919, annual session.

76. *Loc. cit.*

1. **Journal Lancet**, XLV (September 15, 1925), 442. The membership in 1925 was 327; this actually shows a loss of 43 members from 1920 to 1925. The figures as to the number of members attending annual sessions are not available.

ing of promoting such strength, was prompted to say, "there can be no question about the desirability of this. We should be as strong as a labor union, coal heavers, blacksmiths, or plumbers, and have as good a control over our members."²

Another problem, one which demanded a more complex solution than a mere increase in association membership, existed in South Dakota medicine. This difficulty, faced by the association, was that of interesting young physicians in establishing rural practice. While considering this problem, Dr. A. G. Allen of Hot Springs made the following comment in 1927: "I hope that some day some of our western states will provide us with doctors who will be willing to go out into the country districts, and that South Dakota will lead the way."³

The National Grange communicated with the State Medical Association in 1928 in hopes that it could impress upon the association the need to increase the supply of rural physicians. The association answered the Grange with the following resolution:

The House of Delegates is keenly alive to the problems involved, and recognizes that although there will always be some inadequacy of medical services in sparsely settled communities, improvement of medical services in rural districts is needed.

That the problem is being intensely studied by the Commission on Medical Education, the Committee on the Cost of Medical Care, the Council on Medical Education and Hospitals, and other bodies.

That the problem is fundamentally economic and the solution involves much more than the mere length and costs of medical education.

That patience and time are necessary in order to obtain data and evolve methods of solving this problem.

That suggestions from the National Grange and information will be welcomed by the House of Delegates and by any of the bodies especially engaged in the study of medical education and economic problems.⁴

2. *Ibid.*, p. 452.

3. *Journal Lancet*, VLVII (August 1, 1927), 350. In 1925, 135 (or 41.3%) of the total 327 members of the association were practicing in the cities of Aberdeen, Huron, Sioux Falls, Mitchell, Rapid City, Yankton, and Watertown.

4. *Journal Lancet*, XLVIII (October 1, 1928), 439, 440.

The need for more rural physicians was a continuous problem faced by the State Medical Association. In 1945 forty per cent of the South Dakota physicians were located in the eight largest cities. In these cities there was one doctor for every 804 people, while the rest of the state was forced to get along with one doctor for every 2,542 people. To further complicate this problem, only thirty-three per cent of the city physicians were over sixty-five years of age, while forty per cent of the country doctors were over sixty-five.⁵ This "lack and improper distribution of physicians" was considered the association's "most serious problem," by its president, F. S. Howe, in 1947. He stated that of the 409 physicians in the state 104 were over sixty-five years of age. As for distribution, "We have at the present ten counties without any M.D.'s. We also have six counties, containing an area of a thousand square miles or more in which there is only one physician."⁶

The State Medical Association established a placement service in 1950 to facilitate placement of rural physicians. This agency, handled by the executive secretary, has aided in supplying physicians in rural areas that might otherwise have been without medical service. The latest figures, for the year 1953-54, show that the placement bureau provided information on request to 40 physicians and 16 communities.

It is not possible to state just how many placements were consummated on the basis of this information but five known placements show up in the records. The main increase in activity of the placement service is in the number of physicians looking for locations which indicates an easing of the so-called shortage of doctors.⁷

5. *Journal Lancet*, LXV (September, 1945), 338. The association in 1955 had a membership of 448, or an increase of 121 members over 1925. The cities of Aberdeen, Huron, Mitchell, Yankton, Watertown, Rapid City, and Sioux Falls received 100 of these 121 new members. However, the increases in Sioux Falls from 43 in 1925 to 82 in 1955 and in Rapid City from 8 in 1925 to 45 in 1955 account for the greatest share of this increase.

6. *Journal Lancet*, LXVII (October, 1947), 377. These 409 physicians are the total number for the state, and are not all members of the State Medical Association, which in 1947 numbered about 347.

7. *South Dakota Journal of Medicine and Pharmacy*, VII (August, 1954), 260.

(To be Continued in April)



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MUSCULAR DYSTROPHY

The February 1955 issue of the **American Journal of Physical Medicine** is devoted to muscular dystrophy. This same material has been published in book form as the Proceedings of the Third Medical Conference of Muscular Dystrophy Association of America, 1954. These reports contain a wealth of information for both research workers and research minded clinicians. Symposiums are included on recent advances in basic muscular chemistry; physiology and pharmacology; contraction, degeneration, regeneration and growth of muscle; clinical management of patients; patient service program, and the recent advances in knowledge of metabolic attractions in muscular dystrophy.

At this conference a motion picture demonstration, recording in color with magnetic sound, progressive muscular dystrophy by split frame cinematography was presented. The film presented excerpts from splitframe kodachrome movies of children with progressive muscular dystrophy, participating in a program designed to test the therapeutic merits of alpha-tocopherylhydroquinone in progressive muscular dystrophy. The recordings were of activities prior to and subsequent to therapy for simultaneous comparative analysis. Anyone in the medical profession interested in a valuable film for clinical teaching and general educational purposes could write to the Department of Surgery, Anatomy, Pediatrics, and Medicine, University of Rochester Medical Center, Rochester, New York.

Considerable research is underway on animals; guinea pigs, monkeys, rats, and particularly rabbits in dystrophic conditions. At the monthly seminar of the University of South Dakota Medical Staff, Dr. I. C. Smith

of the Biochemistry Department, reported on a study carried on last summer by Stanley R. Nelson, a sophomore medical student, and himself. This investigation was supported by research grants of the National Cancer Institute, Public Health Service and the American Cancer Society (South Dakota Division). The investigation was on the effect of Vitamin E on the free amino acids of various rabbit tissues. Four male rabbits were given a dystrophy producing diet while two litter mates consumed an adequate diet. When creatine excretion rose rapidly indicating the onset of dystrophy the animals were sacrificed. Two of these had shown severe dystrophy as evidenced by respiratory difficulties and inability to right themselves after being placed on their sides. It was concluded that vitamin E deficiency in rabbits is characterized by a distinct pattern change in free amino acid levels in various tissues. The decrease in glycine suggests that it is in some unknown way implicated in the dystrophic state. There was a general increase in free amino acids of muscle, heart, spleen, and liver of dystrophic animals. Only glycine and serine were markedly reduced; kidney and especially the brain showed general decrease in free amino acids and glycine was more consistently reduced in the various tissues than other amino acids.

The entire issue of the **American Journal of Nutrition**, July-August, 1956 is a symposium on the role of some of the newer vitamins in human metabolism and nutrition. On page 386 is found an article by Dr. Paul L. Day, Prof. of Biochemistry at the University of Arkansas and Dr. James S. Dinning associate professor, entitled "Nutritional Muscular Dystrophy in Monkeys Receiving a Diet Deficient in Vitamins B₆ and E." After

ten months on a composite diet deficient in Vitamins E and B₆, the animals developed a progressive muscular weakness with changes in the cytology of peripheral blood and in the amounts of certain nitrogenous constituents in the urine and on the 330th day with a sharp increase in creatine excretion and a moderate increase in output of allantoin. All of these physical, chemical, and cytological changes responded to the administration of atochopheral. The part of the deficiency of B₆ vitamin is unknown.

According to a discussion by Dr. Grace A. Goldsmith (p. 419) man's requirement of Vitamin E, at the present time is in the early stages of development. No beneficial results to date are shown in treating human muscular dystrophy with this vitamin. It would seem desirable to produce a multiple vitamin deficiency in man instead of vitamin E alone. Deficiency may occur under certain physiologic and pathologic conditions, but more experimenting needs to be undertaken.

Mrs. Esther Howard
Medical Librarian

HEREDITARY SPHEROCYTOSIS—

(Continued from Page 82)

SUMMARY

A case report of hereditary spherocytosis has been presented to emphasis:

1. Hereditary spherocytosis occurs in infancy.
2. Splenectomy controls the hemolytic phase and should be performed at what ever age the disease appears.
3. The hereditary pattern by the presentation of a family pedigree in which hereditary spherocytosis is present and 14 members have had splenectomy.

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Acknowledgement is made to Robert F. Thompson, M.D., and G. Robert Bell, M.D., of the Yankton Clinic, for assistance. Dr. Bell's present address — De Smet, South Dakota.

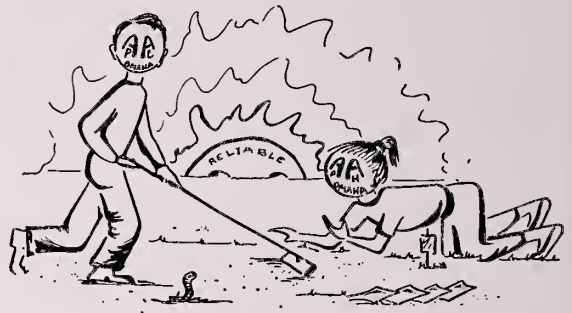
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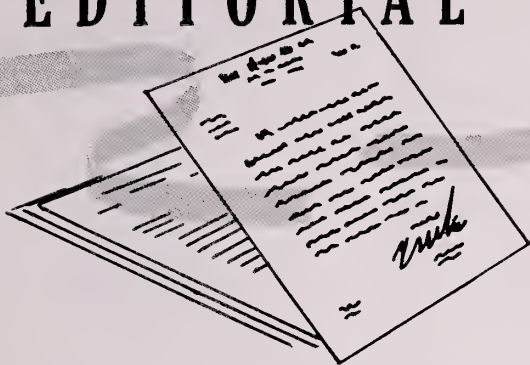


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**PHYSICIANS CASUALTY & HEALTH
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EDITORIAL PAGE



PROTECT YOURSELF AS WELL AS THE PUBLIC

The men and women who work with poliomyelitis before, during, and after it strikes are not only urging all citizens to take Salk vaccine, but they are taking shots to protect themselves from paralytic polio.

Doctors, nurses, occupational therapists, physical therapists, and medical social workers are among the professional personnel at the New York University-Bellevue Medical Center who typify this move among those who work in the health fields.

"You can't see the effects of paralytic polio on people's lives and not do everything in power to protect yourself," Dr. Walter Thompson, Professor and Chairman, Department of Orthopedic Surgery, New York University Post-Graduate Medical School, said. "To fail would be as foolish as ignoring the flashing light at a railroad crossing. You **might** be lucky, but if you aren't"

The staff at New York University-Bellevue Medical Center and the National Foundation for Infantile Paralysis urges **all** persons, at least up to 40 years of age, to take the shots. Over 25 per cent of the polio cases in 1955 were among older people and seven out of every ten respirator cases today are 20 years of age or over.

"Polio cases in the future, though fewer in number, may be concentrated in the upper age group and may be of even more serious consequence than the general level of the past," Dr. Thomas Rivers, Medical Director of the National Foundation said. "This situation will become more obvious unless the current reluctance of young adults to be vaccinated is overcome."

Members of every profession related to medicine strongly urge their contemporaries to take the vaccine — properly spaced to effect maximum protection.

"It requires nearly eight months to complete the three shots if they are taken properly," said Dr. George E. Armstrong, Director of the Medical Center and Vice President for Medical Affairs of New York University, "and it is a lot cheaper than chancing a lifetime with a disability."

Performance of the Salk vaccine up to now suggests a potential effectiveness among persons who have received all three shots, properly spaced, of about 90%. With only one shot, one cannot be sure that one is safe or that the immunization will last after the first; a second shot increases one's chance of being among the immunized. The third shot, given seven months after the second, further increases one's chances of being safe and it prolongs the term of safety, perhaps for years.

During the 1956 vaccine manufacturers brought supply up to meet demand. The 100,000,000th cubic centimeter of Salk vaccine was released by the U. S. Public Health Service in Washington in mid-September. There are no more priorities on use of commercial vaccine. It is available for all who want it.

Members of the staff of the National Foundation for Infantile Paralysis have already received two of the three shots required and will take the third early in the spring.

If YOU haven't already done so, resolve (1) to take the shots and (2) to encourage all those with whom you come in contact to do likewise.

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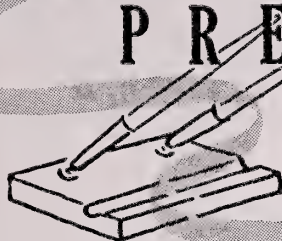
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P R E S I D E N T ' S P A G E



Dear Members:

Favorable reports have come to me in regard to the Medico-Legal Meeting held jointly with the Legal profession in Huron, South Dakota, January 26th. I want to thank Dr. Swanson of Pierre especially and all others who took part in it, making it the success it was. I'm only sorry I couldn't be there.

The campaign to vaccinate all persons under 20 years of age against Polio is well under way. Both as to publicity and notifying the membership of our society first and then the Districts and letting them carry on the publicity and arrangements for giving the vaccine at the local level. I trust that the Public will now be able to avail themselves of this most valuable contribution that medical science has made for the eradication of this dreaded disease. If practically all the population of this age group are not vaccinated, it will only be because of their own apathy.

We are in the midst of the National Heart Association drive for funds for the program of the next year. Let us all get behind this and actively support this with our money and co-operation. Funds from this source have been allocated to the University of South Dakota for research. It has been stated by those who come to our school to consider us for research grants, that our facilities are excellent. It is a bit early to report anything on legislation of bills effecting the medical profession. May I thank those who have been so generous with their time to spend a few days out at Pierre. I know you have gotten a view of another side of our democratic life and have learned something new outside of medicine.

Sincerely

Alonzo P. Peeke, M.D.

President



This is your MEDICAL ASSOCIATION

RAPID CITY SOCIETY ELECTS OFFICERS

Dr. Gordon Paulson will head the Rapid City Medical Society for the ensuing year assisted by **Dr. Raymond Boyce**, vice-president, and **Dr. Hubert Theissen**, secretary-treasurer.

New 1957 committee heads include: **Dr. Gordon Olsson**, program chairman; **Dr. Wayne Geib**, in charge of the library at St. John's McNamara Hospital; **Dr. W. A. Dawley**, public policy and legislation. **Dr. E. T. Ruud** and **Dr. R. B. Bray** will serve on a committee to establish a definite liason between the Society and the new Rest Home in prospect, probably for the Sioux Park area.

Dr. Dawley will act as coordinator of panels of physicians called upon to discuss affairs of public interest before social groups and **Dr. A. A. Lampert** will head the committee to supervise medical care at the county Home.

PAST PRESIDENT OF ASSOCIATION DIES

Funeral services were held in Long Beach, California for **Doctor Bertram M. Hart**, 80, former Onida, S. D., mayor who died the 25th of January.

A native of Beloit, Wisconsin, **Dr. Hart** went to South Dakota in 1883. He was a teacher, farmer, banker, druggist and physician in central South Dakota until his move to California in the middle 1940s. He was a graduate pharmacist from South Dakota State College and received his M.D. at Northwestern University, Evanston, Illinois.

He was a past president of the State Medical Association, a past grand patron of the Eastern Star, a Mason, Methodist and lifelong Republican.

WHITNEY NAMED HEALTH OFFICER

Dr. N. R. Whitney, Rapid City physician, has been appointed by the Pennington County Board of Health as county health officer and medical consultant to the health department.

Dr. Whitney replaces **Dr. David S. Berkman** who has moved from Rapid City to a practice in another state. **Whitney's** appointment was recommended to the Board of Health through the Medical Advisory Committee which serves as a liaison between the local Medical Society and the Health Department.

NEWS NOTES

The South Dakota Board of Medical and Osteopathic Examiners which met in January, granted a license by reciprocity to **Dr. Patricia J. Stuff**, Yankton.

Full licensure was given to four persons who have been practicing with temporary licenses under the displaced persons law. They are **Drs. Rudolph Avotins**, Faulkton; **Karlins Avots-Avotins**, Carthage; **Eugene Urbanyi**, Gettysburg and **Karlis Zvenjnieks**, Leola.

* * *

Dr. Charles R. Price will be associated with **Dr. P. D. Peabody** in the Tekakwitha Clinic in Sisseton. He is a native of Rapid City, having obtained his pre-medical training in South Dakota. **Dr. Price** received his medical degree from the University of Nebraska College of Medicine and Surgery located in Omaha.

* * *

Dr. Burton A. Kolp, a resident physician and surgeon in Volga for four and one-half years, expects to go to Glenwood, Minn., to join two other doctors in a clinic.

Dr. Kolp is dissolving a partnership with **Dr. A. P. Peeke**. He and his family

will move to Glenwood in March or April.

* * *

D. William E. Edyvean, Fort Collins, Colorado has arrived in Deadwood to practice general medicine. He will have offices with **Dr. F. S. Howe** in the Black Hills Trust and Savings Building. * * *

Dr. Earl L. Roberts, Waukegan, Illinois, has joined the staff of the Veteran's Administration hospital in Hot Springs. * * *

Dr. Frank Boyd, who practiced briefly with his father at Flandreau, S. D., has established a practice at Jasper, Minnesota.

* * *

Dr. John C. Hagin, Miller, has announced that he will be joined in practice by **Dr. James H. DeGeest**, a native of Miller and a graduate of the University of Minnesota.

* * *

John C. Foster, executive secretary of the State Medical Association, was one of the featured speakers at the national conference on professional relations of Blue Shield plans in Chicago, February 11th.

* * *

Doctor R. G. Mayer, Aberdeen, attended the Salk Vaccine Program in Chicago on January 26th and on January 27th attended a meeting of the Chicago Urological Society. * * *

Doctor P. V. McCarthy, Aberdeen, who was recently nominated for the Distinguished Service Award by the Aberdeen District Medical Society, attended a meeting of the American Society of Roentgenologists in Chicago recently.

ABERDEEN DISTRICT SOCIETY MEETS

"The Aberdeen District Medical Society held its regular monthly meeting in the Ball Room of the Alonzo Ward Hotel on Wednesday evening, February 6th. About twenty-five members were present, and about a dozen members of the Womens Auxiliary at the dinner which preceded the meeting. At the business session the society endorsed the program for stimulating the use of Salk vaccine. **Dr. P. V. McCarthy** was nominated for the Distinguished Service Award for 1957, because of his many years of service for the South Dakota Cancer Society, and as councillor of the first district. **Dr. E. J. Perry**, of Redfield, gave a brief resume of the legislative problems at Pierre. The Scientific part of the program was presented by **Dr. Paul G. Bunker**, of Aberdeen, who spoke on 'Do's and Don'ts of Common Ear, Nose, and Throat Disorders.'"

MEDICAL SCHOOL NEWS NOTE

Dr. A. A. Lampert, Rapid City physician who has special interest in medical organizations, addressed the Student American Medical Association of SUSD on Wednesday, February 13. Lecturing on medical associations, Dr. Lampert was the fourth invitational speaker to talk before the medical students and faculty of the University during the school-year.

* * *

Dr. Austin Smith, Editor of the Journal of the American Medical Association, ad-

ressed the student medical group on Wednesday, March 13. Previous speakers talking before the group have been **Dr. Hugo Andre**, Vermillion physician; **Dr. Roy Knowles**, Sioux Falls psychiatrist; and **Dr. Magoon**, Professor of Anatomy at UCLA.

* * *

Guest speaker at the annual Dinner-Dance on April 6 will be **Dr. Marcus Bach**, world traveler, author, and popular interpreter of intercultural relations. Entitled "This They Believe," Dr. Bach's address will include a discussion of his meetings with **Dr. Albert Schweitzer**.

MEDICS ATTEND PIERRE SESSIONS

Members of the South Dakota State Medical Association turned out in force to observe and to present their ideas to legislators during the thirty-fourth session of the Legislature in Pierre. In addition to Dr. G. W. Mills, who is an elected member of the House of Representatives, the legislature halls were visited by Dr. A. P. Peeke, Volga, president of the Association; Dr. A. P. Reding secretary, and Councillors B. T. Lenz, C. R. Stoltz, C. J. McDonald, J. J. Stransky.

Others who talked to their representatives were Doctors A. Repsys, E. A. Hofer, L. J. Pankow, R. E. Van Demark, E. J. Perry, John Gregg, Howard Wold, Joseph Hamm, D. L. Kegaries, F. T. Younker, Robert Hayes, Preston Brogdon, T. B. McManus, S. F. Sherrill, G. E. Van Demark, R. A. Boyce, S. J. Walters, and R. Lillard.

NEW! SUPER ANAHIST® PLUS CODEINE

For sale over the counter without a Prescription in Drug Stores only



The finest Cold Tablet formula available for sale over the counter

SUPER ANAHIST Plus Codeine NEW EXCLUSIVE FORMULA

Each tablet contains...

Codeine Phosphate 2.0 mgs. (Warning: May be habit forming)—most effective common ingredient for stopping coughs.

Thonzylamine Hydrochloride 25 mg.—best-known antihistamine to check early cold symptoms, sneezing, watering eyes and many other histamine effects.

Ascorbic Acid (Vitamin C) 20 mg.—important in helping to maintain resistance at its optimum level.

Aspirin $3\frac{1}{2}$ gr.—Phenacetin $1\frac{1}{2}$ gr.—most widely-used drugs for the home relief of pain; more effective, as combined, than if taken separately.

Caffeine $\frac{1}{2}$ gr.—a recognized protection against depressive effects of colds and other suffering.

We quote from—

“The Pharmacological Basis of Therapeutics —Second Edition—Page 250”

“Small amounts of codeine (2 Mgm) will decrease the frequency of coughing without altering significantly the respiratory minute volume. Coughing should not be unnecessarily depressed, especially if bronchial secretion is profuse, because drainages will then be insufficient and complications may ensue.”

In short, we give the retail druggist a Therapeutically effective Cold Tablet with Codeine which can be freely dispensed over the counter without a prescription.

You Participate Personally in Anahist Pharmacy Scholarship Award in Your Own State

Anahist Company guarantees to donate 25¢ for every half dozen Super Anahist plus Codeine purchased by the Retail Drug Trade (we anticipate a sale of 250,000 dozen, which would provide a fund of \$125,000) to an Anahist Pharmacy Scholarship Fund to send some worthy boy or girl to Pharmacy School for one year, or to assist some Pharmacy Student now in school, at the discretion of the Dean of the Pharmacy School he or she is now attending.

It is intended that each state will partic-

ipate to “whatever percentage of the total accumulated fund was contributed by that State to the fund”.

It is our intention to make the distribution of the fund as flexible as possible, so that students can be attracted to Pharmacy, or assisted when they need it, without a lot of restrictions.

The exact method of distribution of the fund to each State has not been worked out at this writing, but this pledge by the Anahist Company is all Pharmacy needs.

This Anahist Pharmacy plan starts with shipments of Super Anahist plus Codeine about December 1, 1956 and Anahist guarantees to keep it in effect at least until December 1, 1957.

SEE YOUR WHOLESALE DRUG SALESMAN FOR DETAILS

MARCH 1957

PHARMACEUTICAL SECTION



HAROLD S. BAILEY, PH.D.
EDITOR

Division of Pharmacy
College Station, South Dakota

PHARMACEUTICAL *Paper*



SYNTHETIC SUSPENDING AGENTS*

by

Winthrop Lange, Ph.D.
South Dakota State College
Brookings, South Dakota

Suspensions are defined, by the U.S.P. XV, as preparations of finely divided insoluble drugs either intended for addition to some suitable liquid vehicle prior to use or already dispensed in a liquid vehicle. The former type of suspension does not cause the pharmacist any trouble. In this case drugs, such as the antibiotics, are pre-mixed with suspending and flavoring agents in the dry form by the manufacturer. The pharmacist merely adds the correct amount of water before dispensing the product. However, in the latter type of suspension, unless it is a patented preparation, is where the pharmacist is called on to use his judgment and knowledge in the preparation of a satisfactory product. It is this type of compounded suspension which is to be discussed in some detail.

In general, suspending agents serve three purposes. First, they decrease the settling rate of the insoluble material to the extent that a more uniform dose is obtained by the patient. Second, they provide a uniform dispersion of insoluble substances. This has been verified by an increased rate of absorption, increased anthelmintic action, and by greater protective action of various mixtures to which suspending agents have been added. Finally, an increase in palatability may be noted. In the case of quinine sulfate, the bitter taste is not noted in a suspension as it is in a solution.

Selection of a Suspending Agent

The choice of a satisfactory suspending agent is of great importance. The suspending agent of choice can only be selected after considering its relationship to the ingredients present in the suspension. Among the problems which must be considered are: chemical compatibility, acid-base relationship (pH), stability, possibility of mold growth, physiological activity, alcohol concentration, temperature, and inorganic salts or ions in solution. However, not all of these situations are confronted in any one suspension.

One of the most difficult problems encountered by the pharmacist in preparing suspensions is clumping (caking) of the insoluble material on the bottom of the container. This can usually be minimized by either increasing the viscosity of the preparation or by the addition of a surface active agent. (The use of surface active agents is a topic all by itself and will not be discussed at this time.) However, the pharmacist must remember that the consistency of the final product must be such that it may be readily poured from the prescription container.

In the last few years, the cellulose ethers have found increasing use as suspending agents. Many of the problems involved in the selection of a suspending agent are eliminated with these synthetic compounds. They are compatible with most drugs and high concentrations of alcohol. They are relatively stable, physiologically inert, soluble in water,

* Presented at the Pharmaceutical Institute at South Dakota State College, April 1956.

and not affected to any great degree by variations in pH. Their uniform consistency allows the pharmacist to prepare identical suspensions on prescription refills. The disadvantage of these compounds are their salting out or precipitation from solution in the presence of polyvalent ions and gelation due to high temperatures. Preservatives are usually added to suspensions of these agents where the possibility of mold growth is present. In other words, if suspensions are to be prepared in stock quantities, it is best to add a preservative. A marked drop in viscosity, in the absence of polyvalent ions, usually indicates the presence of mold growth. At the present time methylcellulose and carboxymethylcellulose are the most important agents for internal suspensions. However, continual research is being carried out on other cellulose ethers.

Synthetic Agents

Methylcellulose (Methocel, Dow Chemical Co.) is chemically and physiologically inert. Solutions of methylcellulose are not affected by changes in pH. They are stable in the presence of dilute acids and show a slight increase of viscosity with dilute alkalis. Methylcellulose is salted out of suspensions which contain polyvalent ions in solution. Hence, it is not the suspending agent of choice for such preparations.

Methylcellulose is available in a wide variety of viscosity types; each type being designated by a number: 15, 25, 100, 400, 1500, and 4000. The viscosity type is defined as the viscosity of a 2 per cent w/w aqueous solution at 20°. Thus a 1500 cps. methocel is a type which in 2 per cent aqueous solution has a viscosity of 1500 centipoises. The 1500 and 4000 cps. types are the most economical as suspending agents. The lower viscosity types are frequently employed in ophthalmic solutions.

Methylcellulose is a hydrophilic colloid. Thus it can be dissolved in water most easily by first wetting it thoroughly with either hot water or alcohol. The solutions obtained in this manner are clear, odorless, tasteless, and colorless.

Carboxymethylcellulose (CMC, Hercules Powder Co.) is also chemically and physiologically inert. Solutions of it show the same order of stability as methylcellulose. It cannot be used successfully with suspensions con-

taining polyvalent ions in solution. The polyvalent ions cause a precipitation of CMC due to the presence of the reactive carboxyl groups.

Carboxymethylcellulose is available in three viscosity types: low, medium, and high. A 2 per cent solution of the medium viscosity type will give you a viscosity of from 300-500 cps. at 25°. The high viscosity type — 70 — will give you a viscosity of from 20,000-50,000 cps. Thus, you can see that solutions of carboxymethylcellulose have a wider range of viscosity for a given percentage strength than solutions of methylcellulose. This is not necessarily a disadvantage, for slight changes in viscosity are not readily noticed by casual examination of a suspension.

Carboxymethylcellulose is available as the sodium salt. Thus, solutions are readily prepared in either hot or cold water. When solutions of CMC are to be stored for long periods of time, a preservative should be added.

Hydroxyethylcellulose (Cellosize, Carbide & Carbon) is one of the newer cellulose derivatives. It is still in the experimental stage as a suspending agent. High viscosity types have only recently been introduced for research work. It is known to be water soluble and affected by high temperatures. All of its chemical, physical and physiological properties are not known at the present time.

Carboxymethylhydroxyethylcellulose (CM-HEC, Hercules Powder Co.) is another of the new cellulose derivatives. The sodium salt was introduced to extend the range of carboxymethylcellulose where polyvalent ions are present in solution. It is currently being investigated for use in dermal preparations high in alum content.

Suspension Prescriptions

The following are some sample prescriptions in which the cellulose ethers have been employed as the suspending agent.

Rx		
	Bismuth subcarbonate	3.6
	Methylcellulose 400 cps	30.0 cc.
	Cinnamon Syrup	10.0 cc.
	Water q. s. ad.	60.0 cc.

The bismuth is triturated with a small amount of water to form a paste. The syrup is then added, followed by the 2 per cent solution of 400 cps. methylcellulose, and water.

Rx		
	Calamine	4.8
	ZnO	4.8
	Glycerin	2.0
	CMC med. visc. 2%	
	q. s. ad.	60.0

Wet the calamine and zinc oxide with the glycerin.

Rx		
	Resorcinol	6.0
	ZnO	6.0
	Propylene glycol	12.0
	Alcohol	24.0
	Methocel 1500 cps. 2%	
	q. s. ad.	120.0

Dissolve the resorcinol in the methocel solution and add the alcohol. Wet the zinc oxide with the propylene glycol and add the methocel solution to it.

Rx		
	NaCMC	1.8
	MgO (Heavy)	1.6
	Spearmint H ₂ O q. s. ad.	120.0

Dissolve the sodium carboxymethylcellulose in one half the spearmint water. Slowly triturate the magnesium oxide with the sodium carboxymethylcellulose solution. Finally, add the remainder of the spearmint water. Heavy magnesium oxide is preferred in suspensions as it is less likely to clump.

Rx		
	Sulfadiazine	4.5
	Sulfamerazine	4.5
	Sulfamethazine	4.5
	Syrup Chocolate	30.0
	Methocel 4000 cps.	
	1% soln. q. s. ad.	90.0

Wet the sulfas with a small quantity of the methocel solution. Add the syrup and finally q.s. with methocel. The completeness of the

wetting of the sulfas can be noted more easily with the clear methocel solution than it can be with the syrup.

Rx		
	Washed Sulfur	12.0
	Sodium lauryl sulfate .1%	
	Methocel 400 cps.	70.0
	Water q. s. ad.	90.0

The sulfur is mixed with the surface active agent, (Sodium lauryl sulfate), triturated with the methocel solution, and brought up to volume with water. Sulfur cannot be readily wetted by water. It is usually pre-treated with alcohol or a surface active agent.

These are but a few examples of suspensions that are used either internally or externally. Many veterinary preparations also lend themselves readily to suspension type preparations. Compounds such as sulfamethazine (Sulmet, Lederle Labs.) and phenothiazine are easily suspended with the cellulose ethers. Research with these compounds is being carried on at the present time in the Pharmacy Division of South Dakota State College.

Sources of Information

Pharmacists may contact the Division of Pharmacy, South Dakota State College, for assistance with their particular problems found with suspensions. Also, additional information on the various suspending agents discussed may be obtained from the following places:

1. **Methocel**, Dow Chemical Co., Sales Office, 1255 Rand Tower, Minneapolis 2, Minnesota.
2. **Carboxymethylcellulose (CMC)**, Hercules Powder Company, District Office, 332 South Michigan Avenue, Chicago 4, Illinois.

Shoe Last designed to the shape of average normal foot★



● Insole extension and wedge at inner corner of heel where support is most needed.

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MISERABLE COLD

each coated tablet:

Phenacetin (3 gr.)	194.0 mg.
Acetylsalicylic Acid (2½ gr.)	162.0 mg.
Phenobarbital (¼ gr.)	16.2 mg.
Hyoscyamine Sulfate	0.031 mg.
Prophepyridamine Maleate	12.5 mg.
Phenylephrine Hydrochloride	10.0 mg.





RECENT PHARMACEUTICAL *Specialties*

PEN-VEE-CIDIN

Description: Penicillin V with Salicylamide, Promethazine Hydrochloride, Phenacetin, and Mephentermine Sulfate.

Uses: Pen-Vee-Cidin is a multiple-action capsule specifically compounded for relief of the symptoms of the common cold and for the prevention of bacterial complications. Clinical evidence indicates that it is especially useful in the treatment of patients who are highly susceptible to upper respiratory infections. Each capsule contains 100,000 units of Penicillin V, which is particularly active against gram-positive organisms and thus controls secondary bacterial complications often associated with colds.

How supplied: Capsules, bottles of 36.

Source: Wyeth Laboratories, Philadelphia, Pa.

PACATAL

Description: Pacatal is mepazine — a derivative of phenothiazine, chemically related to chlorpromazine, and promazine.

Uses: A phrenotropic or normalizing agent for use in the treatment of a variety of psychoses. Administered synergistically in combination with chlorpromazine, Pacatal also makes possible reduction of dosage and elimination of side effects of both drugs. The manufacturers describe the action of Pacatal as "normalizing" allowing the patient to think more clearly, and leaving him fully alert.

How supplied: Tablets of 25 mg. and 50 mg. in bottles of 100 and 500, tablets of 100 mg. in bottles of 500, and 2 cc Ampules in boxes of 10 and 50 (25 mg./cc.)

Source: Warner-Chilcott Laboratories.

ENZEON

Description: Enzeon is a suspension of 5,000 units of chymotrypsin (a purified, crystallized mammalian pancreas enzyme) in sesame oil.

Use: Enzeon is used to relieve inflammation, reduce edema in such conditions as chronic ulcers, hematoma, swelling due to trauma, cellulitis, bursitis, arthritis, phlebitis and eye inflammation. It is also used to promote healing and restore local circulation.

Dosage: Enzeon is administered by intramuscular injection.

How supplied: Enzeon is supplied in 5 cc. multidose vials.

Source: George A. Breon & Co.

VI-PENTA DROPS

Description: Three new forms of Vi-Penta Drops designed to fulfill the particular needs of a specific age group.

Vi-Penta No. 1, containing vitamins K, E and C, is particularly useful for prematures and full-term infants during the first week of life.

Vi-Penta No. 2 provides vitamins A, D, C and E which are necessary for infants up to one year of age.

Vi-Penta No. 3 — formerly called Vi-Penta Drops — contain eight essential vitamins for infants and children of all ages. Only the name of this long-established vitamin supplement has been changed; the formula and flavor remain the same.

How supplied: Vi-Penta No. 1, 5 cc vial; Vi-Penta No. 2, 15 and 50 cc vials; and Vi-Penta No. 3, 15, 30 and 50 cc vials.

Source: Hoffmann-LaRoche.

NOSCAPINE

The potent cough suppressant, formerly known as narcotine, has been given a new

(Continued on Page 107)



MEDICAL CARE FOR PUBLIC ASSISTANCE RECIPIENTS

Recently portions of the Social Security Law were amended which concern Federal matching of medical care expenditures for recipients of old age assistance, aid to dependent children, aid to the blind, and aid to the permanently and totally disabled. These amendments become effective July 1, 1957. The following information concerning these amendments was furnished this Journal through the courtesy of the Secretary of the American Pharmaceutical Association.

This program comes under the jurisdiction of the Bureau of Public Assistance of the Social Security Administration of the Department of Health, Education and Welfare.

In order to encourage and assist the states to provide more adequate medical care for public assistance recipients, separate matching of medical care expenditures is provided through the amendments which become effective July 1, 1957.

Specifically, the Federal Government will provide 50 percent of the amount spent by the states for medical care (vendor payments) up to a maximum determined by multiplying \$6 a month by the number of adult recipients, and \$3 a month by the number of child recipients.

States can continue to provide for medical care needs through money payments and receive Federal matching funds up to the individual maximum on money payments, but all vendor payments would come under the separate matching provisions.

As at present, each state will determine for itself the kinds and extent of medical care it wishes, and can afford to provide, but whatever type of services it chooses to pay

for will be provided on a statewide basis — that is, it cannot provide services in some counties and not in others or to some persons who need them and not to others in the same circumstances.

Under the separate matching plan, a state can broaden its medical care beyond hospitalization and include payment for surgery, nursing and drugs.

Not all states have included medical care in their public assistance programs. There is nothing compulsory about providing medical care. However, the states have been under considerable pressure to provide medical care, and the funds which become available July 1, 1957 on a matching basis as indicated above, are intended to meet the need for medical care of those who are unable to pay for it or to pay for it only to a limited extent.

Some states have been furnishing funds for medical care, and there are two ways in which this has been done. One is to supply funds directly to the individuals requiring assistance and permit them to purchase whatever they need within the limitations of the funds provided. Another is to make what are designated as "vendor payments," namely, payments to the professions for services or material supplied.

State Pharmaceutical Associations will be interested in the method of supplying drugs, and the suggestion has been received from various sources that it would be well if a plan of procedure like the Veterans Administration Hometown Medical Care Program could be instituted and followed with respect to these public assistance programs. However, there is a difference between the laws providing medical care through the Veterans

Administration and through the Public Welfare or Public Assistance Departments of the respective states. In the case of the Veterans Administration, the entire program is operated by the Veterans Administration which is a Federal organization with branches throughout the United States.

The Public Assistance Program, on the other hand, is devised and administered at the state level, and Federal participation is limited to supervision over the general requirements and adherence to the standards formulated under the provisions of the Social Security Act. Maximum responsibility for the development of Public Assistance Programs, and the details for carrying out such programs, rests strictly with the states.

Rules and regulations for the distribution of funds to become available July 1, 1957, and methods of procedure in connection with the provision of medical care have not been issued by the Department of Health, Education and Welfare to cover the July 1 proviso as yet.

Actually, only about half the states have taken a very active interest in the development of these medical care programs, since the Federal matching funds do not become

available for about six months. This is the time, however, for those who are interested in providing essential advice and guidance with respect to the problem of supplying drugs to contact State Public Assistance or Public Welfare Administrators who have charge of this program, and offer their help. It is expected that Advisory Committees to the State Public Assistance Directors will be appointed, and in fact, have been appointed in some states for the existing programs. There are a number of states in which pharmacists, through their state associations, have cooperated very extensively in the launching and promulgation of these programs.

It is important, if no contacts have been made with Public Assistance Directors, that State Pharmaceutical Associations explore the situation immediately and offer such cooperation and assistance as may be indicated.

The American Pharmaceutical Association has established liaison with the Social Security Administration and with the Bureau of Public Assistance, and will be in a position to supply information both to the Federal agencies and to State Pharmaceutical Associations as the program progresses.

HYDROCORTISONE PREPARATIONS RETAIN Rx STATUS

In an announcement from the Food and Drug Administration appearing in the January 17 Federal Register, the request of certain pharmaceutical manufacturers to permit ointments and lotions containing hydrocortisone and hydrocortisone-acetate to be sold without prescriptions was denied.

According to Food and Drug Commissioner Larrick's statement, the available evidence failed to show that these drugs are safe for use without medical supervision.

In denying the petition to exempt these drugs from prescription-dispensing requirements, Commissioner Larrick said:

"The available evidence fails to show that hydrocortisone and hydrocortisone-acetate ointments and lotions are safe for

use in self-medication as provided in the proposed regulations to exempt such articles from prescription-dispensing requirements.

"The evidence now available does not include adequate tests by all methods reasonably applicable to show whether or not such preparations are safe for use under the conditions proposed. In particular, it fails to include reports of tests sufficiently extensive to demonstrate adequately the range of absorption of hydrocortisone and hydrocortisone-acetate through the skin and adjoining mucous membranes on application of such preparations to the skin. Further, it fails to include studies adequate to establish the significance of such absorption."

IMPROVEMENT OF NURSING EDUCATION IN SOUTH DAKOTA

In April of 1950, a group of organizations participated in a survey of nursing needs and resources in South Dakota. Among those interested in the supply of well qualified and trained nurses were veterans and farmer groups, high school principals, hospital and nursing administrators, the South Dakota Federation of Labor and officials of the State Board of Nursing and South Dakota Nurses Association.

From this survey a number of recommendations concerning nursing education in South Dakota were made. In the last six years, many of these recommendations dealing with the degree course for nurses were put into effect by the Division of Nursing, South Dakota State College. In order to familiarize South Dakota pharmacists with the progress being made in nursing education here in this state, the following material is taken from a report by Mrs. Helen Gilkey, Director of Nursing, to the survey participants.

Recommendation: "That a study be done to determine the reasons why nurses graduating from schools in South Dakota are going out of state to work and that an active program be established to make employment and the social life of the nurses in South Dakota more desirable."

How implemented: South Dakota State College is using resources available within the state for teaching students in nursing. The students thus go out of state only for specialized areas of study and are less subject to recruitment by out-of-state institutions. Emphasis is placed on the community hospital in South Dakota as a place of employment and the students are encouraged to enter into the social life of the community by living in private homes approved by the Dean of Women during their clinical nursing courses.

Recommendation: "That nurses be prepared for their administrative duties in the small rural hospital . . . and the role of the hospital in the community health program . . . Rural experience in the basic nurses training course would prepare and recruit the future nurse for this field."

How implemented: (1) South Dakota State

College has appointed Miss Hazel Hubbs as Head of the Rural Nursing Department to work with all schools of nursing in South Dakota and the rural hospitals and local citizen committees in planning student experiences in the small rural hospital and in developing knowledge of local community health programs; (2) Courses for the already registered nurse who needs additional preparation are offered through two programs leading to a degree in nursing at South Dakota State College.

Recommendation: "Here, as in other areas student experience prepares and interests the future nurses in working in this kind of hospital" referring to tubercular patients.

How implemented: South Dakota State College has completed an agreement with the U. S. Public Health Service Division of Indian Health for the college students in nursing to have an opportunity to study and learn about tuberculosis nursing at Sioux Sanatorium in Rapid City. The first group of college students in nursing to enroll for this course will arrive in Rapid City on December 12, 1957. Mrs. Ruth Rea, a college faculty member, will be with them full time so that this will be a very superior type of experience for the students.

Recommendation: "That the State Board of Nurse Examiners and the State League of Nursing Education assume more advisory responsibility for basic degree programs and correlate the number with the needs of the State."

How implemented: The Division of Nursing at South Dakota State College has very actively worked with the licensing agency and with the professional organization in planning and in establishing the changes made in the college program in nursing.

Recommendation: "That those colleges and universities now participating in basic degree programs review very carefully their programs to determine how they can improve them to meet present standards for collegiate nursing education."

How implemented: The Division of Nursing at South Dakota State College has carefully reviewed its degree program since the **Report** — (1) In 1952, the curriculum was

changed from a five-year course to four calendar years; (2) In 1956, the course was placed on a straight educational basis of four academic years (36 months) by having the students in nursing carry the same load of seventeen credit hours for twelve college quarters as other students in the College. This could be done by eliminating the traditional pattern of having nursing students work for the hospital for board, room, and laundry which had left them time only to carry ten to twelve credit hours each quarter; (3) The students in nursing pay for their own room and board during the four years. The students are free in the summer to rest or to earn money; (4) The College controls the educational courses and hospital nursing practice of the student and there is careful meshing of theory and practice; (5) The nurse faculty on the College staff meet the same qualifications and requirements for education and personal background as any other College faculty member in addition to professional nursing qualifications; (6) The students in nursing are admitted on the same basis as any student is admitted to College. Tuition, fees, and other costs are the same. They have all the benefits of a college education with professional preparation; (7) The Division of Nursing at South Dakota State College is now a member agency of the National League for Nursing which establishes the criteria for accreditation of all college programs in nursing.

Recommendation: "That the basic degree program sponsored by the State be re-organized in such a manner that the clinical field experience will be on a college level and that there will be better integration and coordination of the whole program to meet the standards suggested."

How implemented: In 1956, South Dakota State College completed this reorganization:

1. The first clinical nursing experience of the student in nursing is obtained in hospitals of a size typical in South Dakota. The hospitals and health agencies were carefully selected for the learning opportunities they offered to students in nursing.

2. All classes in theory are taught by nurse faculty members who are employed full-time by the College.

3. Hours of nursing practice are established on the basis that each block of four hours carry one credit, and the students spend 24

hours per week learning to care for hospitalized patients in addition to the classes on nursing theory. The full-time and completely qualified nurse faculty members of the College who teach the theory classes also supervise the students in the hospital and health agency for nursing practice in the same subject being studied.

4. The hours the students spend in nursing practice are planned on a regularly scheduled basis like that of other laboratory courses and are included in the College schedule of class and laboratory hours.

5. The students progress on a planned schedule from less difficult course subjects and nursing practice to increasingly difficult course subjects and nursing practice similarly with other students in the College.

6. The students in nursing at South Dakota State College complete the program leading to both a College degree in nursing and eligibility requirements for licensure in the same length of time as pharmacy, engineering, or home economics students and high school teachers.

RECENT SPECIALTIES—

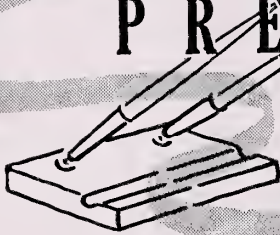
(Continued from Page 103)

generic name which removes the connotation that the antitussive is a dangerous narcotic. The new term approved by the American Medical Association is "noscapine." The change also has the blessings of H. J. Anslinger, Commissioner of the U. S. Bureau of Narcotics, and Nathan B. Eddy, Secretary of the Committee on Drug Addiction, National Research Council of the Institute of Health.

Use of the new term is expected to increase the use of cough preparations containing noscapine. A spokesman for Merck & Co., which manufactures noscapine for cough medicine under the brand name Nectadon, indicated that his firm felt the name change was a definite contribution to public health.

"When noscapine was called 'narcotine', many people regarded it as an addicting drug because the term so strongly suggests it. Not only is this cough suppressant non-addictive, but it is non-toxic as well. Moreover, noscapine has no ill effect on blood pressure or respiration. We think the American Medical Association has performed a real public service in removing an unfortunate term from cough preparation labels, which no doubt caused a lot of potential users to shy away."

P R E S I D E N T ' S P A G E



Fellow Pharmacists:

Ground Hog's Day, Lincoln's Birthday, Valentine's Day, Basketball Tournaments, and Washington's Birthday make February a busy if short month. So is it any wonder the day came around for my President's Page message and I had nothing to offer? Going through my desk, which is some little undertaking, I found a picture that Roy Doherty had taken of the executive committee the last time we met in Pierre. It brought this thought to my mind. How many of us are aware that Roy takes hundreds of these pictures in a year's time, develops them and either sends them to the person or some magazine or paper in that locality? So I am sending him my thanks for this service until he is better paid.

And maybe some of you don't know it yet, but he has been elected District Governor for Rotary International for the coming year, a not small honor in these United States.

More druggists in the news, as Maylou Amunson has been appointed to the Board of Regents. We are all proud of her. Only wish Swen were here to enjoy it too.

Imagine there are many other druggists who have been similarly honored on local levels, but the news hasn't filtered up this far as yet.

Oh yes, my congratulations to Ted Hustead on his panel discussion as publicity like that is good for our state. Keep it up.

I must say I have rambled on considerably for having nothing to say so will close for now.

Al Knutson, President

Rx PHARMACY *News*

RAPID CITY PHARMACISTS PLANNING 71st SDPhA CONVENTION

Committee plans are being completed for the 71st Annual Convention of the South Dakota State Pharmaceutical Association to be held in Rapid City, June 20-22, according to **Ken T. Eer Nisse**, Local Secretary and General Chairman.

The three-day program will open with registration on Thursday. Members are invited to take advantage of the many recreational opportunities available in Rapid City and the Black Hills that day. There will be a golf event that day, also, with prizes awarded.

The traditional memorial hour is scheduled for the opening business session on Friday, June 21.

The closed business sessions will be held on Saturday and the convention will end Saturday night with the Association Banquet and Dance.

Committee chairmen for the convention include **Kendall T. Eer Nisse**, General Chairman and Local Secretary; **Don Peterson**, Program; **Roy Doherty**, Veterans' Luncheon; **Fred Eickhoff**, Hous-

ing; **Wayne Eberhard**, Prizes; **Welles Eer Nisse**, Sports; **George Tibbs**, Registration; and **Mrs. Lucille Eickhoff**, Ladies Auxiliary.

MEREDITH TO ADDRESS PHARMACEUTICAL INSTITUTE

Donald T. Meredith, Director of Trade and Guest Relations, Upjohn & Company, will address the annual Pharmaceutical Institute to be held on the South Dakota State College campus April 9-10. Mr. Meredith will be the banquet speaker April 9.

Also to appear on the program is **R. D. Watson**, Assistant General Sales Manager, Globe Laboratories, who will discuss the establishment of animal health departments in the drug store.

State College pharmacy staff members will also speak to the Institute. **G. C. Gross, Ph.D.**, Professor of Pharmacology, will present a paper on the new tranquilizing agents; **Norval E. Webb, Ph.D.**, Assistant Professor of Pharmacy, will talk on the use of surface active agents in pharmacy; and **Harold S. Bailey, Ph.D.**, will present the results of the recent

statewide prescription and prescribing practice survey.

Recent legislative decisions affecting pharmacy will be covered by **Bliss C. Wilson**, Secretary of the South Dakota Pharmaceutical Association. Also representing the State Association will be President **Al Knutson** of Clark.

ABERDEEN DRUGGISTS HEAR GROSS AND VOGELE

The five-year plan for pharmaceutical education and the Heart Fund drive were topics discussed at the February 9 banquet meeting of the Aberdeen Pharmaceutical Society. Held in the Alonzo-Ward Hotel, the meeting attracted approximately 50 Aberdeen area pharmacists and their wives.

G. C. Gross, Ph.D., Professor of Pharmacology, South Dakota State College, presented the five-year plan which will go into effect for the training of the nation's pharmacists in 1960. "The new concept of pharmaceutical education is intended to strengthen the pharmacy graduates business and general education qualifications as well as maintaining a

strong scientific training," Gross said.

A. C. Vogele, M.D., Aberdeen physician and a Director of the South Dakota Heart Association, spoke on cardiovascular diseases and their diagnosis. He also introduced a film distributed

by the American Heart Association on heart diseases.

Plans for the Heart Fund Drive in Aberdeen were outlined by President Darrell Nelson, Aberdeen pharmacist. The February drive was under the direction of Aberdeen pharmacists.



Aberdeen District Pharmaceutical Society February Banquet.



Officers and Speakers at Aberdeen District Meeting: Left to right: M. Lloyd Jones, Secretary; Darrell D. Nelson, President; A. C. Vogele, M.D., Director, S. Dak. Heart Association; G. C. Gross, Ph.D., South Dakota State College; and B. P. Bittner, Program Chairman.

PHARMASCOOPS

Kenneth Jones of the Jones Drug, Gettysburg, is recuperating in the Hospital. **Royce Overholser** of Selby is relief pharmacist.

James Stout of the Stout Drug, Aberdeen, was confined to a hospital in Rochester, Minnesota.

Robert Volk purchased the drug store from **Clayton Dietz** at Groton January 14.

Dick Entwisle took over management of the **Voy Drug Store** at Dell Rapids for two years while **Bob Voy** is in the Army at Fort Sill, Oklahoma.

SDSC NURSING GETS THIRD FEDERAL GRANT

A third federal grant for graduate nurses to work toward degrees in nursing education has been approved for South Dakota State College.

Mrs. Helen Gilkey, director of nursing, has been notified by the U. S. Department of Health, Education and Welfare that the third grant has been approved and will begin this spring.

State College is one of 51 institutions in the country participating in the professional nurse traineeship program. It is the only college in a five state area (North and South Dakota, Montana, Nebraska, and Wyoming) offering a program for registered nurses which will prepare them for teaching in schools of nursing or for beginning supervisory positions.

The scholarship, which will be reserved for a resident of North Dakota, will be for the spring and summer terms. It carries a stipend of \$200 a month for pre-bachelor's degree work and covers tuition and fees and travel and dependency allowances.

Two South Dakota nurses have been at State College since last fall on similar scholarships. They are Donna Iler, Burke, and Mrs. Doris Townley, associate director at McKennan Hospital in Sioux Falls.

The nationwide program is designed to increase the number of professional nurses trained for positions as teachers, supervisors, administrators and public health

nurses. At State College the program is used primarily to encourage graduate nurses to work toward degrees in nursing education to help provide qualified instructors for schools of nursing in this area.

BENDER PRESIDENT OF PHARMACY ACADEMY

George A. Bender of Parke, Davis & Company, has been named president of the Michigan Academy of Pharmacy, a group of registered pharmacists organized for the advancement of their profession.

Bender, originator of the Parke-Davis "History of Pharmacy" and "History of Medicine" series of oil paintings and editor of Modern Pharmacy, was elected at a meeting of the M.A.P. board of directors here Monday night. (Jan. 21). He succeeds Henry Maicki, Detroit retail pharmacist.

Mr. Bender graduated in Pharmacy from South Dakota State College in 1923. He was recently selected for inclusion in the publication "Men and Women of Distinction" describing prominent SDSC alumni.

Other newly-elected officers are Dr. Thomas D. Rowe, Dean of the University of Michigan College of Pharmacy, vice-president; and Albert C. Sippel, development pharmacist for R. P. Scherer Corp. of Detroit, secretary-treasurer.

Dr. Rowe and Lloyd Bee-mer, of Parke-Davis, were named to the board of directors of the organization.

FIFTEEN PASS JANUARY BOARD EXAM

The results of a special January Board of Pharmacy examination were recently announced by Bliss C. Wilson, Secretary.

A total of fifteen graduate pharmacists passed the written and practical laboratory examination and three were granted registration by reciprocity.

The examinations were held January 10 and 11 in the modern dispensing laboratories of the South Dakota State College Division of Pharmacy. Work of the candidates was supervised by members of the State Board of Pharmacy - **Harold Mills**, Rapid City; **Milford Schwartz**, Huron; and **Harold Tisher**, Yankton. Assisting the Board members were **Bliss C. Wilson**, Secretary of

the Board, and Pharmacy Inspector **Glenn Velau**, Sioux Falls.

REGISTERED PHARMACISTS

By Examination

Harold D. Backlund
Mankato, Minnesota
Ronald E. Beatty
Garretson
Bruce R. Beier
Winona, Minnesota
George J. Belbas
Sioux Falls
Thomas N. Bischke
Eureka
Robert P. Byers
Clark
William J. Durick
Aberdeen
Donald J. Entwistle
Dell Rapids
Mrs. H. Joan Green
Port Angeles, Washington
Allen A. Pfeifle
Sioux Falls
Robert L. Schlueter
Clark

Miss Hildegarde Skage
Sioux Falls

By Reciprocity

Lyle E. Anderson
Aberdeen
Arend Hoff
Sioux Falls
James Wm. Ryan
Webster



Pharmacy Examination Candidates Working in Modern State College Dispensing Laboratory. Left to Right: Backlund, Schlueter, Durick, Belbas, Byers, Entwistle, Mrs. Green, Bischke, Pfeifle, Beatty and Miss Skage.



State Board of Pharmacy Officials at Brookings Exam.

Officials and members of the South Dakota State Board of Pharmacy who supervised the Registered Pharmacists Examination January 10-11, State College. Left to Right: Harold Tisher, Yankton; Harold Mills, President, Rapid City; Bliss C. Wilson, Secretary, Pierre; Milford Schwartz, Huron; and Glenn E. Velau, Inspector, Sioux Falls.



**Larry Higinbotham
Dakota Representative**

The Druggists' Mutual Insurance Company of Iowa recently announced the appointment of Larry Higinbotham, Brookings, S. D., as representative in the North and South Dakota area.

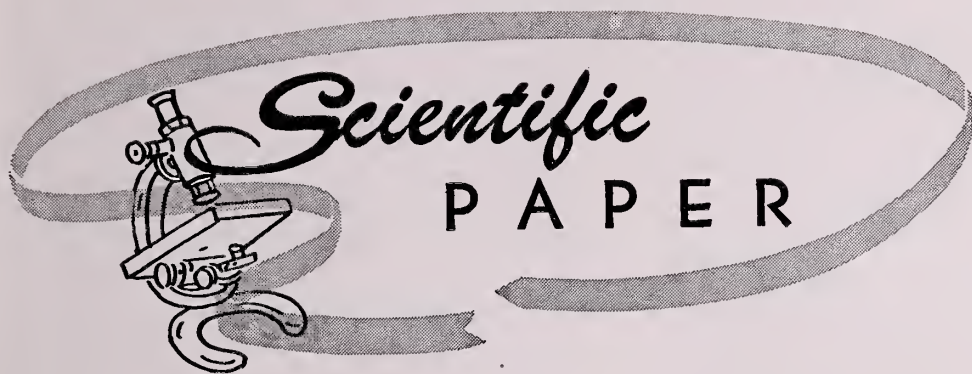
ATTENTION PHARMACISTS

Pharmaceutical Institute

April 9-10

STATE COLLEGE CAMPUS

Brookings, South Dakota



GASTROINTESTINAL DYSFUNCTION DUE TO DIABETIC NEUROPATHY

By Gordon S. Paulson, M.D.
Rapid City, S. D.

Whatever its cause, chronic diarrhea is a distressing symptom and presents difficult diagnostic and therapeutic problems. When it coexists with certain systemic diseases, an important aspect of the diagnostic portion of the problem is the determination of the cause and effect relation, if such exists, between the systemic disorder and the diarrhea. In "diabetic diarrhea," of which the case here to be presented is an example, the diarrhea is believed to be directly due to diabetic neuropathy which in turn is a well recognized complication of diabetes mellitus. The purpose of this presentation is to call attention to this relatively little known and rarely recognized syndrome of gastrointestinal dysfunction secondary to diabetic neuropathic involvement of the visceral autonomic nerves and to review the available literature on the subject.

The patient, R. B., a 32 year old traveling salesman was first seen March 15, 1954 complaining of intermittent right lower quadrant abdominal pain of several months' duration. He stated that the pain was absent when his bowels functioned normally and appeared only during periods of constipation. The pain was more marked while he was on the road as a salesman and relatively mild during his brief sojourns at home. It was difficult to elicit any definite pattern to his complaint, but it appeared that the pain would come on in slowly recurring cramps in either lower abdominal quadrant or the midab-

domen at any hour of the day and would persist for several days or until relieved by a normal bowel movement. The pain did not radiate to the back and was unaccompanied by audible sounds, palpable peristalses, or tenderness. About ten days prior to this hospitalization, he had experienced a brief spell of diarrhea consisting of two or three semiliquid stools one evening. He was unaware of having passed any bloody, mucous, or tarry stools at any time. He had held his present job for seven years. There were no new habits, responsibilities, or emotional situations which might account for his constipation which had been present for one year. Sometimes he would have an urge to defecate about 20 minutes after breakfast but was unable to do so. In his words, "It seems to get stuck in the lower bowel."

He had been a known diabetic since 1948 following a brief period of the usual triad of symptoms. Although he was considered a severe diabetic from the onset he had never been in recognized acidosis. He admitted to being rather careless in adhering to his diet and had not checked his urine for several years. He had been taking 40 units of protamine zinc insulin each morning and attempted to adjust his diet to his subjective feelings. His weight remained fairly constant since the weight loss which occurred just before he was diagnosed a diabetic. Insulin reactions had been rare. He had not noted any visual difficulties, numbness, or tingling,

but was aware of generally diminished strength and stamina.

There was no past history of any serious illness, injury, or surgical operation except that he had been quite seriously ill with scarlet fever while in the military service in 1945. Both parents were living and well at advanced ages. There were four siblings living and well and there was no knowledge of diabetes or other familial disease.

Physical examination was that of a well developed, lean man of 32 years who did not appear overtly ill. The blood pressure was 106 systolic and 70 diastolic; the pulse was 72; and the temperature was 98.6. The teeth had been replaced by complete dentures. A brief neurological survey indicated diminution of both ankle jerks but normal knee jerks and plantar reflexes. A fundoscopic examination failed to disclose diabetic retinopathy. In all other respects the physical examination was interpreted as within the limits of normal.

Laboratory tests revealed a normal sedimentation rate and hemogram and a fasting blood sugar of 239 mg. per 100 cc. of blood. After four days of observation and treatment, he felt better subjectively, his diabetes was under satisfactory control, and he was dismissed without further studies with a tentative diagnosis of "irritable bowel" syndrome.

He was next seen at the office over a year later on July 5, 1955, complaining again of gastrointestinal symptoms. His principal complaint now was diarrhea which had recurred weekly, curiously every Saturday, for five weeks. The weekly spell of diarrhea would consist of two or three liquid brown stools, after which he would experience obstipation for several days. There was no accompanying pain, nausea, vomiting, pyrosis, or specific food intolerance. Quite regularly about two days after his spell of diarrhea, he would develop a steady pressing sensation which he hesitated to designate as pain in the lower abdomen which gradually increased in severity as it pushed toward the upper abdomen. There was no tenderness, cramps, or radiation of the sensation toward the back. This sensation would be relieved by the first normal formed stool which would appear one to two days later.

At this visit he denied having any of the

usual diabetic symptoms and admitted again that he was paying little attention to his diabetes. Physical examination was again essentially negative. He was advised to follow a bland as well as diabetic diet, to omit coffee, and to take an antispasmodic.

On July 23, 1955, he appeared to be satisfied that he was improving, stating that he had had only two brief spells of diarrhea since the preceding visit. But on August 6, 1955, because of continued bowel irregularity, he was again hospitalized. The gastrointestinal series at this time revealed no organic lesion but disclosed hypomotility and slow emptying of the stomach. The colon was normal according to barium studies and the proctosigmoidoscopic examination revealed no organic lesion but did show considerable spasm.

On September 3, 1955, he was seen again as an outpatient, stating that following his barium enema in August he had had to resort to an enema to evacuate the barium and had had to take an enema for every bowel movement since, sometimes after waiting for a spontaneous bowel movement for five days. He had had an urge to defecate almost every morning but was unable to accomplish an evacuation. A trial of urecholine at that time was ineffectual.

On November 1, 1955, he described his bowel habit as varying from complete obstipation to diarrhea, the latter lasting some twelve hours at a time and frequently occurring at night. Anticholinergic drugs tried at this juncture to control hyperactivity of the intestinal tract were without benefit. On November 3, a gastric analysis revealed 8 degrees of free hydrochloric acid in 15 minutes, 10 degrees in 30 minutes, 12 degrees in 45 minutes and complete absence in one hour. With this evidence of hypoacidity, oral hydrochloric acid was given a trial but again with no benefit.

On November 13, 1955, he was admitted to the hospital for a re-evaluation of the entire problem. The history was in no essential different from that recorded above. Additional information included the occasional occurrence of fecal incontinence during spells of nocturnal diarrhea and the complaint of sexual impotence and loss of ejaculatory power for several months.

Physical examination disclosed a generally

sickly appearing man of 34 years. The blood pressure was 100 systolic and 60 diastolic in the supine position, 80 over 60 in the sitting position, and 75 over 50 in the standing posture. The patellar and Achilles' reflexes were absent bilaterally. The Babinski response was normal and the biceps reflexes were both exaggerated. Vibration sense, position sense, and the Rhomberg reaction were normal. There were no abnormalities of superficial sensation.

X-ray studies of the gall bladder and of the colon were interpreted as normal. No abnormalities of mucosal pattern or of transit time were observed in x-ray studies of the small bowel. Hypomotility of the stomach with some retention after four hours, but no organic lesion, was again noted by x-ray studies. The basal metabolic rate was minus 21 per cent. A starch tolerance test (fasting blood sugar 149 mg. per cent rising to 215 mg. in 30 minutes, 325 mg. in 60 minutes, 390 mg. in 2 hours, and 448 mg. in 4 hours after administration of the starch meal) was interpreted as failing to indicate abnormality of pancreatic function, at least as far as amylase activity was concerned. Routine blood counts, sedimentation rate, routine serology for lues were again negative. No parasites or ova were discovered in direct examination of the feces. Analysis of a 24 hour specimen revealed a total of 1.5 grams fat, of which 0.6 gram was neutral fat and 0.9 gram fatty acid. A stool culture failed to grow any pathogens.

Despite the lack of any objective evidence for pancreatic insufficiency, a therapeutic trial of pancreatic granules was instituted, again without any improvement in the distressing symptom complex. A final therapeutic attempt consisting of bland diet, antispasmodics, kaolin and pectin preparations was unsuccessful. At this point, the patient was dismissed from the hospital and instructed to take 1000 mcgm Vitamin B-12 intramuscularly and 4 cc crude liver extract daily on alternate days on an outpatient basis for a presumptive diagnosis of diarrhea due to diabetic neuropathy. This program was followed faithfully and thoroughly until March 1956, and was coincident with marked improvement in the clinical situation. His diarrhea diminished, his general sense of well-being improved, and he returned to his job as traveling salesman for an auto-parts com-

pany. In March 1956, it would appear that his old penchant for self-negligence caught up with him and he gradually discontinued his medications. His alternating diarrhea and constipation began to return and in August 1956, he complained that his weight was dropping and that rather severe pains were developing in the back and legs. He was in a depressed emotional state and appeared to have become quite convinced that "nothing could be done for him."

Although observed in the diabetic clinic of Doctor Joslin¹ in 1912, one of the earliest descriptions of "diabetic diarrhea" was published by Barger, Kepler and Bollman² in 1936. These authors made a special point of stressing its intractability and its failure to respond to pancreatic preparations. In distinguishing between the diarrhea of pancreatic insufficiency and that of diabetic neuropathy they point out the classically bulky, fat-laden, and malodorous stools in the former condition as well as the absence of pancreatic enzymes in the duodenal contents, the frequent calcareous changes in the pancreas demonstrated by x-ray studies and the usual mild degree of the diabetes, if it is present at all. The diarrhea of diabetes in contradistinction usually follows a long period of poorly controlled diabetes and is characterized by liquid, brown, watery stools. The failure of the latter form of diarrhea to respond to pancreatic substances provides another differentiating feature.

The subject at hand has been reviewed comprehensively by Sheridan and Bailey³ who presented a series of 40 diabetics with this complication. They emphasized the intermittency of the diarrhea, the frequent nocturnal occurrence, and the not infrequent nocturnal fecal incontinence. They state that patients with this disorder often have little trouble during the day, but that they may have ten or more watery brown stools at night. The average age at onset in their series was 42 years, and the average duration of the diabetes at the onset of the complication was 9 years. In 17 of their patients who had gastrointestinal x-rays, the results were normal. Barium enemas were done in 28 of their group and reported as normal in all except six in which spasticity was noted. Proctoscopy was normal in the 15 individuals in whom it was done. Relaxed anal sphincter

was a feature in 38 patients who had a digital rectal examination. Histamine achlorhydria was present in 14 out of 29 patients who had gastric analysis. In 17 out of 18 who had spinal fluids examinations made, the protein content was increased, the average value being 88 mg. per 100cc, and in 6 instances exceeding 100 mg. Diabetic retinitis was identified in 11 out of 33. Therapeutic programs consisting of bland diet, vitamins, sulfonamides, hydrochloric acid and other common remedies were completely unsuccessful in their experience. Parenteral crude liver extract in doses of 2 to 4 cc daily for 4 to 6 days followed by weekly doses proved to have distinct value, emphasized by the fact that the diarrhea was likely to recur with cessation of treatment. Diabetic neuritis of classic pattern preceded the onset of diarrhea in 58 per cent of the 40 cases and in 2 cases the diarrhea ceased when the neuritic symptoms disappeared. Sheridan and Bailey³ consider the syndrome one peculiar to diabetics, especially where previous diabetic control was unsatisfactory as it was in all 40 of their series.

Points essentially similar to those above are also brought out by Joslin, Root, White, and Marble who have reviewed a series of 96 cases of diarrhea in diabetics.¹ Duncan⁴ mentions delayed emptying of the stomach as a not infrequent finding. Stating that these patients tend to be underweight, he believes that malnutrition plays a part in the syndrome. He further mentions roentgenologic evidence of disturbed motility of the gastrointestinal tract with occasional scattering of barium in the small bowel suggestive of that seen in severe deficiency states. According to Duncan, epigastric pain similar to the gastric crises of *tabes dorsalis* is known in association with diabetic neuropathy.

Swarts and Stine⁵ have described the case of a 33 year old truck driver with diabetes for ten years who developed urinary retention, nocturnal urinary incontinence, and occasional diarrhea and constipation. Frequent vertigo on assuming the erect posture, impotence, and anesthetics and paraesthetics of the extremities were additional complaints. The fact that the patient was markedly underweight was ascribed to dietary inadequacy due to skipping meals. Tendon reflexes were absent and there were both delayed gastric

emptying and a deficiency pattern in the small bowel by appropriate x-rays. In this case, practically all of the symptoms improved on specific diabetic therapy without the addition of liver extract.

Rudy and Epstein⁸ have emphasized that so-called diabetic neuropathy is not exclusively a peripheral neuritis as it is frequently considered but a generalized neurological disturbance involving all components of the nervous system — central, peripheral, and autonomic. They also state that diabetic neuropathy can occur in the acute stages of diabetes and in the mild forms of the disease as well as in the severe chronic forms of diabetes.

Mosenthal⁹ has described in diabetics painful spasms of the esophagus and other parts of the gastrointestinal tract, which are usually controlled by successful management of the diabetes. He suggests that the fatty liver sometimes found in diabetes might be an underlying cause of some of this abnormal gastrointestinal function.

Muri¹⁰ has described the case of a 31 year old male worker in whom the diarrhea was the reason for hospitalization before the case was recognized as one of diabetes. In this case there had been 2 or 3 years of weight loss, weakness, and delayed micturition as well as a long history of diarrhea. Necrotic ulcers of the buttocks, postural hypotension, absent tendon reflexes, and failure of the pupils to react to light were features of the physical examination. X-ray studies of the gastrointestinal tract showed delayed emptying of the stomach. The passage of barium through the gastrointestinal tract was so rapid that a gastrocolic fistula was suspected, and the patient was subjected to surgical exploration. No surgically remediable lesion was found and a biopsy of the pancreas was normal. Peristaltic action of the small bowel were noted by the surgeon to be extremely forceful. A therapeutic program consisting of pancreatic enzymes, low residue diet, parenteral crude liver extract, and folic acid failed to provide any relief but a regimen including banthine, atropine, and amphetamine was successful in controlling bowel function at the expense of urinary retention. Without the banthine, the latter disadvantage was obviated, and the patient did well except for an occasional nocturnal defecation in his

sleep. In this case the physiologic equilibrium of the intestinal tract was quite labile, with minor changes in the daily routine liable to cause nocturnal exacerbations of the diarrhea. The patient was considered extremely sensitive psychically by the reporting physician.

Basler and Peters¹¹ have described a number of vague digestive complaints in diabetics such as upper abdominal pain, pyrosis, bloating, belching, and regurgitation all of which are promptly relieved by proper control of the diabetes. It would appear that this type of gastrointestinal dysfunction is not a manifestation of neuropathy but a more subtle reflection of the metabolic abnormality inherent in diabetes itself.

Rabinowitch, Fowler, and Watson⁶ found achlorhydria to be twice as common in diabetics as in non-diabetics. Bowen and Aaron⁷ have reported a series of ten cases of diabetes with continuous and uncontrollable diarrhea and achlorhydria. These observations prompted them to do gastric analyses in 69 diabetics. They found complete achlorhydria in 20 individuals or 29 per cent, ten of whom had diarrhea. No diarrhea was encountered in any of those in whom free hydrochloric acid was found. Of the ten patients with diarrhea, the diarrhea was stopped by hydrochloric acid therapy in six and unaffected in four. In those patients in whom hydrochloric acid therapy was successful in terminating the diarrhea, the diarrhea did not recur when the hydrochloric acid therapy was discontinued. Of the 20 patients with achlorhydria, the average duration of the diabetes was 6.5 years and the diabetes was always severe. The duration of the diabetes in the group with normal acidity was 2.8 years and the duration in the group with hypoacidity was 3.6 years. These observations would suggest that the achlorhydria is capable of being caused by diabetes itself, particularly if prolonged and severe.

* Martin¹² has reviewed evidence that autonomic nerve fibers are involved in far more cases of diabetic neuropathy than would be suspected clinically. This fact was established by employing objective tests of vasomotor function, sweating, and skin temperature. Martin compared 5 normal patients, 5 diabetics without clinical neuropathy, and 20 patients with peripheral neuropathy. In all 20 of the last group, the tests indicated def-

inite dysfunction of the vasomotor and sudomotor nerves. Using the same methods, abnormal responses were found in 2 patients with neuritic pains in the legs at night but without abnormal neurologic signs, and in another patient having diabetic nocturnal diarrhea, fecal incontinence, and impotence. Martin reviews the reports from the literature concerning the pathology of nervous tissue in diabetic neuropathy and declares that pertinent information is scanty. He describes biopsy material and concludes that diabetic neuropathy is a degenerative process in which the small calibre non-myelinated fibers deteriorate faster and earlier than the larger myelinated ones. The fact that the autonomic fibers supplying the gastrointestinal tract are in the small non-myelinated class would suggest that autonomic dysfunction due to diabetic neuropathy is probably much more common than recognized.

Berge, Wollaeger, Scholz, Rooke, and Sprague¹³ have recently reported six cases of intractable diarrhea and steatorrhea complicating long standing diabetes with neuropathy. All six cases showed evidences of autonomic neuropathy using objective tests. Although steatorrhea was present in these cases, external pancreatic insufficiency and other known causes of steatorrhea were effectively ruled out. In none of these six patients did pancreatin provide any therapeutic benefit. With the exception of the steatorrhea noted in this small group, these cases appeared to follow the usual pattern encountered in "diabetic diarrhea." Berge, Wollaeger, and associates review the features of this condition, emphasizing the frequent incidence of nocturnal occurrence, fecal incontinence, post-prandial exacerbation, abdominal cramps, absent ankle jerks, abnormal sweating, impotence in males, sensory disturbances, abnormal pupillary responses, postural hypotension, vesical dysfunction, and neuritic pains.

Rundles¹⁴ states that diabetes produces to a greater extent than any other disease a profound disturbance in autonomic nerve function. Disturbances in pain and thermal sensitivities, mediated by small poorly myelinated fibers are common. Other symptoms arising from autonomic dysfunction which are not uncommon in diabetics are night sweats without fever or infection, tachycar-

dia, intolerance to heat and cold, weakness, fainting spells, and bizarre gastrointestinal and genitourinary symptoms.

(See Table I)

TABLE ONE

Clinical Findings in 30 Patients with Diabetic Neuropathy and Gastrointestinal Symptoms
(Rundles)¹⁴

Impotence, atonic bladder, or both	18 cases
Diabetic retinopathy	16 cases
Orthostatic hypotension	8 cases
Hepatomegaly	6 cases
Gastrointestinal symptoms	
Cramps, pain, borborigmi	22 cases
Anorexia	20 cases
Severe constipation	15 cases
Vomiting	13 cases
Fecal incontinence	8 cases
Diarrhea	7 cases
Alternating constipation and diarrhea	4 cases
Nocturnal diarrhea	3 cases

In an exhaustive and comprehensive review of 125 cases of diabetic neuropathy, Rundles¹⁵ states that 53 out of 125 developed constipation as peripheral neuritis appeared and that it was severe in 22 cases. Twenty-seven of the 125 developed chronic diarrhea alternating with constipation. Of ten patients with almost continuous diarrhea, the diarrhea was nocturnal and punctuated by episodes of fecal incontinence in some. In some patients, meals were followed soon by gaseous distension, borborigmi, and urgent passages of liquid stools containing recognizable recently eaten food. Some with constipation and diarrhea had recurrent periods of nausea and vomiting, and one had pain comparable to the gastric crises of tabes. Some of them showed abnormal patterns of gastric and intestinal motility.

Comment

Patient R. B. appears to be a classic example of "diabetic diarrhea" or diarrhea due to diabetic neuropathy involving the autonomic nerves. Because of the observations above that diarrhea is only one phase of a profound disturbance in gastrointestinal function, it is believed that the term "diabetic diarrhea" is an inaccurate one that gives one a limited conception of the overall disease process. The term employed in the title of this paper, though cumbersome, would appear to be more accurate and descriptive.

No attempt will be made here to delineate in precise physiologic terms the mechanism of this dysfunction. It would appear that with both stimulatory and inhibitory components of the autonomic nerve supply to the gastrointestinal tract being indiscriminately

involved, the clinical expression would be unpredictable as is indeed borne out by the descriptive details above. From the evidence cited above it is suggested that the frequent occurrence of gastric achlorhydria might be the clinical manifestation of an autovagotomy by the degenerative neurologic process.

The clinical account of the case of patient R. B. above is purposely recorded in considerable detail in a deliberate attempt to trace the development of this interesting and unusual picture. The diagnosis here appears to be fully justified by the history of intractable, intermittent diarrhea alternating with constipation, frequent nocturnal occurrence of the diarrhea, the occasional fecal incontinence, orthostatic hypotension, sexual impotence, loss of ejaculatory power, diminished tendon reflexes, spasticity of the colon, delayed emptying of the stomach, hypochlorhydria and the partially favorable results from therapy consisting of intramuscular vitamin B-12 and crude liver extract. The failure of fully satisfactory results of therapy in this case, obviously stems in part from lack of enthusiastic cooperation from the patient and in part from the intractable nature of the disease itself.

The case presented here should help to document the teaching that diabetic neuropathy is a complex, diffuse, wide spread, degenerative neurological process of which the deep tendon reflexes are but a very superficial and inadequate measure. This study also bespeaks the extreme complexity of the entire problem of diabetes.

CONCLUSION

A case of so called "diabetic diarrhea" has been presented and the available literature reviewed. The principal clinical features of the syndrome are diarrhea, frequently alternating with constipation, and often characterized by nocturnal occurrence, intractability, and fecal incontinence after a long history of poorly controlled diabetes.

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(Continued on Page 122)



TREATMENT OF SEVERE THORACIC INJURIES*

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A recent newspaper article stated that deaths from automobile accidents during 1956 in this country reached a new high of approximately 40,200. About 25 per cent of these deaths resulted from injuries to the thorax. Thus, it is apparent that physicians frequently are confronted with such injuries. The present discussion will be confined to the more severe crushing injuries of the thorax and the management of the associated cardiorespiratory derangements.

The treatment of thoracic injuries is relatively straightforward, and a few simple considerations during the emergency and the early care of these patients will go a long way toward elimination of late complications. A great number of complications can result from injuries to the thorax, and the ideal management must be based on knowledge of all the varieties of these complications. However, certain basic principles are applicable in every case, and the individual patient's response to these will lead the physician to recognition of the more unusual complications. Care of patients with thoracic injuries resolves itself into (1) maintenance of an airway, (2) relief of pain, (3) maintenance of pulmonary expansion, (4) stabilization of

the thoracic wall and (5) prompt resort to thoracotomy, when indicated.

Maintenance of an Airway

The presence of an adequate airway is of prime importance. Since many of these patients are, or have been, unconscious, it is essential to consider the possible presence of a foreign body that might be obstructing the air passages. Use of a simple oropharyngeal airway may be extremely useful in the initial phases of emergency care. In comatose patients, the passage of an endotracheal tube provides ready access to tracheobronchial secretions as well as a route for the administration of oxygen, but this cannot be utilized for prolonged periods. Intermittent tracheal aspiration by means of a transnasal catheter or the more precise bronchoscope is an effective method of temporarily clearing the airway. However, this requires some manipulation of the patient, which is often dangerous in the presence of associated injuries of the head, abdomen and spinal column.

Tracheotomy is accomplished easily with minimal handling of the patient. It combines all the advantages of the previously mentioned methods, affords ready access to bronchial secretions and allows the nursing staff to assist in the maintenance of a clear airway. It provides more effective ventilation by eliminating dead space in the upper part of the respiratory tract and by reducing resistance to the flow of inspired and expired air.³

*Read at the meeting of the South Dakota Chapter of the American College of Surgeons, Huron, South Dakota, January 12, 1957.

†The Mayo Foundation, Rochester, Minnesota, is a part of the Graduate School of the University of Minnesota.

Control of Pain

A great many factors may contribute to the clinical picture of apparent obstruction of the airway. Excessive pain in the thoracic wall may be the prime factor in limited ventilation. This decreased pulmonary ventilation in turn leads to anoxia and pulmonary edema, retention of bronchial secretions, atelectasis and obstructive pneumonitis, thereby opening the door to a number of late serious complications. With relief of pain, this cycle is disrupted and this alone may provide spectacular clinical improvement by permitting good ventilation and the spontaneous elimination of obstructing bronchial secretions.

The judicious use of narcotics can provide such relief from pain, but individual variations in response to drugs, the presence of associated head and abdominal injuries, and the poor general circulation, with inconsistent utilization of narcotics, limit the usefulness of such agents, particularly during the first few hours after injury. In this early period, when the patient's condition is constantly changing and when one is trying to evaluate various associated injuries, my associates and I prefer not to depend on narcotics but rather to relieve pain in the thoracic wall by blocking intercostal nerves. Some relief of pain is often necessary to permit even the movement required for essential roentgenologic examinations, and alleviation of pain may contribute immeasurably to improvement in the "shock syndrome" that is present so often. It is convenient to use narcotics in such a situation, but it is important that the dose be relatively small and that the drug be given intravenously. We would emphasize the advantages of intercostal-nerve block, which can be accomplished with minimal equipment and little inconvenience to the patient. The pathways of the intercostal nerves are relatively constant and are easily accessible to infiltration with local anesthetic agents. The relief of pain so obtained sometimes is far more prolonged than is expected from the pharmacologic action of the anesthetic agent.

Maintenance of Pulmonary Expansion

Even with minor injuries to the thoracic wall, when reduction in tidal air is minimal, there is pronounced reduction in the utilization of oxygen by the affected lung. The de-

crease in respiratory efficiency may be entirely out of proportion to the roentgenologically demonstrable injury.⁴ If pleural complications, such as pneumothorax or hemothorax or both, also are present, the situation quickly can become desperate. The advantage of taking thoracic roentgenograms at frequent intervals is most apparent in the management of such pleural complications, but changes can occur so rapidly that measures often must be instituted on the basis of clinical observations and results of physical examination. Intermittent aspiration of the pleural space may be sufficient to keep the lung well expanded. However, in these seriously ill patients, it is important that the expansion of the lung be maintained as consistently as possible to permit good ventilation and to assist in the closure of air leaks from the damaged pulmonary surface and in the control of hemorrhage. Control of the pleural space is maintained best by the installation of one or more large intercostal tubes through a trochar with the aid of local anesthesia. Gentle negative pressure is induced in the tubes. With such control, the progress of air leaks and intrapleural bleeding can be followed, which becomes important in a decision concerning thoracotomy.

Stabilization of Thoracic Wall

Instability of the thoracic wall is the result of the fracture of a number of ribs at two or more points along the arc of each rib. On inspiration, the intrathoracic pressure decreases to less than the atmospheric pressure, which compresses that portion of the thoracic wall lacking bony support. In turn, this movement obliterates the negative intrathoracic pressure and effective inspiration of new air cannot be accomplished; this, in effect, increases the amount of space containing dead air. Hyperpnea results but, with the increased rate of respiration, the tidal volume decreases and the patient actually is accomplishing little more than moving air back and forth in the tracheobronchial tree and upper respiratory passages.

The use of adhesive plaster to immobilize the thoracic wall should be avoided. Immobilization cannot be accomplished satisfactorily unless both sides of the thorax are strapped; however, if this is done, respiratory excursions are limited, the effectiveness of the cough is reduced, and a situation particu-

larly detrimental to older persons is produced, because the respiratory reserve in older people already may be limited. Moreover, in spite of every precaution, excoriation of the skin is common when adhesive strapping is employed. This is uncomfortable for the patient and invites infection if subsequent thoracentesis or thoracotomy is necessary.

Skeletal traction is an effective method of stabilizing a portion of the thoracic wall. This can be accomplished with the aid of local anesthesia in a variety of ways. Sufficient weight is used to control the paradoxical motion and for a period determined by the patient's response to trial release of the traction. Immobilization of the "flail chest" in such a manner is an indirect method of improving ventilation and is satisfactory in the management of a majority of patients. However, in the presence of extensive crushing of the thoracic wall, particularly with bilateral injuries, it is difficult to apply traction effectively.

A mechanical ventilator used in conjunction with tracheotomy is of paramount importance for this type of patient. Most of the respirators now being used are cycled by either time or pressure and operate to deliver a certain volume. As Avery and associates pointed out recently, maintenance of the patient at a physiologic level requires that the minute volume must be maintained at a constant value while the pressure differentials are allowed to fluctuate, depending on the elastic properties of the lungs and thoracic wall and the friction in the tissues and airway. The alternating positive and subatmospheric pressure during active respiratory efforts is, therefore, replaced by a fluctuating positive pressure. This, in turn, stops the paradoxical motion of the thoracic wall, and the ensuing adequate ventilation results in great clinical improvement.

Thoracotomy

During the early period after a thoracic injury, when one has assured the maintenance of an airway, treated shock, relieved pain, attempted to keep the lungs expanded and controlled paradoxical motion of the thorax, it is important to keep in mind the possible need for surgical intervention. Associated head and abdominal injuries may dictate the surgical policy, but the need for thoracotomy will depend on the patient's response to the

resuscitative measures already outlined. Clinical signs and roentgenologic evidence will enable one to decide when an operation is necessitated because of continued uncontrolled intrathoracic bleeding, or suspected rupture of a bronchus or the esophagus, or a thoracoabdominal injury.

Ruptured Bronchus. A bronchus is most likely to be ruptured at or within a few centimeters of the tracheal bifurcation; injury of the hilar vascular structures usually is not associated with such ruptures. Associated rib fractures may or may not be present, and evidence of pneumothorax is noted in only 40 to 50 per cent of such cases. Hemothorax will be present in even fewer instances. Mediastinal emphysema without pneumothorax should suggest possible bronchial or esophageal injury.

The local lesions are variable. A tear may occur through the entire thickness of the posterior wall and this may extend up into the trachea. The bronchus may rupture completely in two. On the other hand, a shearing movement may take place, during which rupture of the outer coats of the bronchus occurs but the mucous membrane remains intact. The clinical picture in such instances will be one of bronchial obstruction with loss of pulmonary volume.

In any crushing injury of the thorax, bronchial rupture should be suspected if there is a persistent air leak into the pleural space with inability to expand the lung, or if evidences of bronchial obstruction are present. Bronchoscopy will be diagnostic and surgical repair is indicated. This type of injury is compatible with life because, in the reported cases of resection of bronchial strictures, a number of patients dated their trouble to a crushing thoracic injury, at which time they undoubtedly experienced rupture of a bronchus. If the general condition of the patient permits, immediate surgical repair of the ruptured bronchus is indicated.²

Ruptured Diaphragm. The presence of a ruptured diaphragm may be obscure at the time of injury. This is illustrated by an unpublished review of a series of cases of traumatic rupture of the diaphragm seen at the Mayo Clinic; in a majority of these instances, the patients did not come for medical attention for months or years after the original injury.

The diagnosis of a ruptured diaphragm should be considered in any injury to the thorax in which the position of the diaphragm remains obscure. In some of these cases, the patient's life will be threatened by the consequences of the herniation of abdominal viscera into the thorax, whereas no unusual symptoms will be apparent in others. Roentgenologic examinations using a contrast medium will be diagnostic, as will the simple roentgenologic demonstration that the end of a tube passed through the nose into the stomach is located in the thorax.

Unless some specific contraindication, such as a head injury, is present, it is preferable to repair the diaphragm when the diagnosis is made. A transthoracic approach usually is employed. If injury to the abdominal viscera is apparent, it may be necessary to cross the costal arch with the incision or make a separate abdominal incision.

Ruptured Aorta. Traumatic rupture of the aorta is unusual but, like many rare lesions, this serious complication has been diagnosed more frequently as surgical technics have progressed. It has become apparent that not all persons with ruptured aortas die immediately, and one cannot dismiss the possibility of such a lesion just because the injured person is alive.

Traumatic ruptures of the aorta are usually in the transverse direction and are most common at the isthmus just distal to the insertion of the ligamentum arteriosum. Of 70 ruptures of the aorta reported by Strassmann, 40 were at the isthmus. The predilection for this site is explained on the basis of a relatively fixed aortic arch but a mobile descending aorta, with rupture caused by rapid deceleration of the parts, although at a different rate, and a sudden increase in the intra-aortic pressure. Abbott has expressed belief that the aorta may be congenitally weak in the regions that are prone to rupture.

With the technical knowledge gained in recent years in vascular surgery, particularly with reference to the aorta, it would appear reasonable to attempt early repair of this serious vascular injury.

COMMENT AND SUMMARY

With today's emphasis on faster transportation, physicians undoubtedly will see an increasing number of patients who have crushing injuries of the thorax. The application of a few resuscitative measures that take cognizance of the derangements in cardiorespiratory physiology will contribute

much to a decreased mortality rate for this group of patients.

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GASTROINTESTINAL DYSFUNCTION—

(Continued from Page 118)

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The History of the South Dakota State Medical Association

(Continued from March)

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Pierre, South Dakota

ALLIED ORGANIZATIONS

The state association, in solving its various problems, was aided by allied organizations. Of these, obviously supreme was the parent of all state societies, the American Medical Association. Each year elected delegates represented the Medical Association of South Dakota at the national meeting sponsored by the paternal organization. One of the finest contributions made to the State Medical Association was the knowledge and inspiration received by these delegates to the American Medical Association.

The financial expense of trips to American Medical Association meetings unfairly rested upon the resources of the individual delegates. For this reason it was often difficult to select a member of the association financially able to meet the expense of the trip. This problem was expressed in the words of the president, Dr. Grosvenor (1930), "If you leave it up to me to pay expenses, I won't go. Business is too darned bad in my neighborhood, and I believe it is so all over the state and all over the country."⁸ Several times the South Dakota State Medical Association failed to have representation because its delegates did not feel financially able to pay their own expenses.⁹ Because of these conditions the medical association passed a resolution to pay "... the necessary expenses of our delegates to the A.M.A. meeting in 1930, and thereafter ... from the funds of the State Medical Association."¹⁰

On the regional level, the State Medical Association was represented in the Regional State Medical Conference. The first regional conference was held at St. Paul, Minnesota, on January 14 and 15, 1928. This initial meet-

ing brought together the officers of the state medical associations of Wisconsin, Minnesota, North Dakota, and South Dakota and an observer from Iowa. The session was called for the purpose of discussing mutual medical problems.

To indicate the scope of the program outlined at the first regional conference, it may be mentioned that reports from the following committees were presented:

Hospital and Medical Education, Public Health Education, Medical Schools, Contract Practice, Dues, Editing and Publishing, Heart Committee, Military Affairs, Wisconsin Basic Science Law, Minnesota Basic Science Law, and the New Medical Practice Act of Minnesota.

In addition to these committee reports, papers were read and discussions held concerning the following topics:

The County Medical Society, The Secretary's Relationship to the Legislative Program, The Finances of the State Medical Association, Cooperation between the Medical Profession and the Druggist in Regard to Public Health, The Medical Profession and Newspaper Publicity, How the Rural Medical Man and Newspaper Man can Cooperate, How a Component Society can Make Its Meetings Interesting.¹¹

It was the feeling of the South Dakota delegation that the Regional State Medical Conference was a "going concern" and "that the profession will be benefited by its accomplishments."¹²

This conference, still in existence, has taken on the more specific title of the North Central Medical Economics Conference. Including Iowa and Nebraska, the conference meets annually in St. Paul or Minneapolis, and it exerts considerable influence on problems of medical organization.

8. *Proceedings of the House of Delegates, May 20-22, 1930, Annual Session*, Unpublished manuscript on file in the office of R. G. Mayer, of Aberdeen, South Dakota.

9. *Loc. cit.*

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11. *Journal Lancet*, XLVII (October 1, 1928), 456.

12. *Loc. cit.*

On the state level, the State Medical Association became represented on the Professional Inter-Allied Council. This body had its inception in 1934, when the State Pharmaceutical Association invited the State Medical Association and the State Dental Association to send representatives to its annual meeting to be held at Brookings.

During the session it was suggested that the medical, dental, pharmaceutical, nurses, and hospital associations should have a committee in common to secure better legislative programs, economic and social programs which the various associations might have in common.¹³

The Professional Inter-Allied Council first met in 1936. Since that time it has given unity and cohesion to the various elements of the profession. Its influence has been especially noticeable in the passage of state legislation, the Basic Science Bill of 1939 being the most important.¹⁴

On the local level, a contribution to the efficiency of the State Medical Association was made in 1930, when each district medical society was allowed to present an annual report to the House of Delegates of the state organization. This providing of a means for the local districts to air their opinions helped stimulate mutual understanding and proficiency within the state organization.¹⁵

BENEVOLENT FUND

An allied group encouraged by the State Medical Association was the Women's Auxiliary to the South Dakota State Medical Association. The auxiliary, composed of the wives of association members, originated in the Black Hills Medical District in 1910, under the leadership of Mrs. R. D. Jennings. This group has the distinction of being the oldest continuous organization of its kind in the United States.¹⁶

A program of medical benevolence for the benefit of needy physicians and their families was originated by the Women's Auxiliary in

1939. The following year a joint benevolent fund was created by the auxiliary and the medical association. This fund was to go untouched until it reached a minimum of \$5,000. In the meantime most of the money (\$1,239.50 the first year) was invested in Series F. Bonds, with the remainder (\$226.87 the first year) being deposited in the Madison Security National Bank.¹⁷

The economic stability of the medical profession improved with the years, and the fund created in good faith by the Women's Auxiliary was never used for its original purpose. Many of the younger physicians who had not lived during the time of the depression could see little sense in such a fund, and even looked upon it as a "disgrace to the profession."¹⁸

It was not until the 1955 annual session that an active use for the above fund was proposed. The Benevolent Fund Committee of the State Medical Association was at that time abolished, and a joint committee was created, consisting of two representatives from the auxiliary and two from the medical association. This committee, using the old benevolent fund, which had reached a total of \$6,716.77 by 1955, was to administer loans to needy medical students.¹⁹

It has been shown that the efficiency of the State Medical Association was improved on the national level by the American Medical Association; on the regional level by the Regional State Medical Conference; and on the state level by district committees, the Women's Auxiliary, and the Inter-Allied Council. The greatest single step, however, toward increased efficiency of the medical association came in 1946, when John C. Foster was hired as executive secretary.

EXECUTIVE SECRETARY

Although Dr. B. A. Dyar of De Smet capably served as part-time executive secretary from 1936 to 1939, it was not until Mr. Foster's appointment that a trained administrative executive controlled the workings of the association.²⁰ Mr. Foster, as executive secre-

13. *Journal Lancet*, LVI (July, 1936), 358. The State Medical Veterinary Association was added to this group in 1935.

14. *Journal Lancet*, LIX (July, 1939), 296. The passage and provisions of this important basic science legislation, which helped to elevate the standing of the medical profession in the state, will be covered in Chapter III.

15. *Proceedings of the House of Delegates*, May 20-22, 1930.

16. For listing of past officers of Women's Auxiliary see Appendix E of this thesis.

17. *Journal Lancet*, LXV (September, 1945), 344.

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19. *Journal Lancet*, VIII (August, 1955), 294.

20. *Journal Lancet*, LXVI (August, 1946), 248, 249.

tary, co-ordinated the functions of the association and promoted relations. His executive office, established in Sioux Falls, handled the Home Town Medical Care Plan for veterans.²¹ In addition, a monthly bulletin, **This Is Your Medical Association** was edited by Mr. Foster. This bulletin was replaced in 1948 by the **South Dakota Journal of Medicine and Pharmacy**, which became at that time the official organ of the state association.²² As for public relations, the executive secretary has made numerous trips throughout the state speaking before high schools, colleges, and social organizations of all types. He has in effect been the voice of the association since 1946.

The State Medical Association, in addition to improving its own unity and efficiency, wished to make direct contributions to the practice of medicine. These contributions have been made through the years in such fields as child welfare, cancer, tuberculosis, mental health, and venereal disease. It should be understood that in these fields the members of the association contributed time and effort, and although there was sincere interest generated by the association, it did not actively carry on extensive programs. However, working through state agencies, primarily the State Board of Health, the association has encouraged its members to participate according to their availability.

The association's Committee on Child Welfare originated in 1920. This committee kept the association abreast of conditions concerning child welfare in the state and nation. The association supported the clinical hygiene program carried on by the State Board of Health and aided in public health education and examination.²³

In 1923 the extension division of the State College of Agriculture, which directed the work of the farm clubs throughout the state, noticed that many of the club children bringing stock to the State Fair were not phys-

ically fit. For this reason the college extension division asked the State Board of Health if arrangements could be made for the physical examination of these children. This project of setting up examination clinics at the State Fair was undertaken by the South Dakota State Division of Child Hygiene under the auspices of the State Board of Health and the State Medical Association. Much to the credit of association members, who donated their time and services, the child health clinic was a success and became a permanent part of the club program.²⁴ In addition, one of the constant goals of the association was to put child welfare before the public directly, by providing speakers for civic groups and social clubs.²⁵

CANCER PROGRAM

The first report made to the State Medical Association concerning cancer appeared in 1929, at which time the association's Committee on Cancer was created.²⁶ This committee in 1933 was authorized to conduct a campaign, "to further the knowledge of the diagnosis and treatment of cancer."²⁷ Reports were given before the association dealing with cancer; mortality statistics were studied and remarks made by individual practitioners. The association encouraged its members to influence their patients to become aware of cancer and consider the importance of periodical physical examinations.²⁸ Thus, the association's main contribution to cancer control, as with child welfare, has been along the lines of public education.

The South Dakota Field Army of the American Cancer Society, originated in 1936, became a leader in the struggle against cancer. The members of the State Medical Association were continually prodded by their officers to assist the Field Army more fully in its work.²⁹ To encourage such assistance,

21. In 1946 a contract was entered into by the State Medical Association and the Veterans Administration, to care for service-connected disabilities of veterans.
22. The contract between the South Dakota State Medical Association and the **Journal Lancet** expired in 1948. The price of the **South Dakota Journal of Medicines and Pharmacy** was set at \$1.50 per year; it was raised to \$2.00 in 1950.
23. **Proceedings of the South Dakota State Medical Association, 1924.** Unpublished manuscript on file in the office of R. G. Mayer of Aberdeen, South Dakota.

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29. **Journal Lancet**, LXIV (September, 1944), 303.

(Continued on Page 127)

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STUDENT AMERICAN MEDICAL ASSOCIATION

The following account of the second address of the Student American Medical Association was written by Leslie Arneson, a second year medical student from Gettysburg, South Dakota and program chairman of the local association.

The second in a series of addresses to the Student American Medical Association of the University of South Dakota was presented on February 13th by Dr. A. A. Lampert of Rapid City. Dr. Lampert, member from South Dakota of the A.M.A. House of Delegates explained the organization and function of the A.M.A. as it effects the practitioner of medicine. Two films were shown, one of which "The Case of the Doubting Doctor" produced by the A.M.A. dramatized and clarified many popular misconceptions regarding the functions of the organization. The other "Night Call" was one of the Cavalcade of America Series presenting a picture of a 24 hour period in the life of a physician. The next program will be on March 13, 1957, when Dr. Austin Smith, Editor of the Journal of the American Medical Association will speak on "The Broadening Responsibilities of Tomorrow's Doctor."

The J.A.M.A. for July 15, 1950 p. 982 gives an account of the founding of the Student American Medical Association. "The House of Delegates at it's Washington Session in December directed the Board of Trustees to make necessary studies and develop appropriate plans for presentation at the next session of the House, toward the formation of a junior American Medical Association. This action of the House was in accordance with a resolution presented originally at the 1949 annual session and again in more specific form at the clinical session."

At the June 1950 San Francisco Session of the House of Delegates the proposal of the Board of Trustees for the establishment of the S.A.M.A. was approved. (Proceedings of the House of Delegates, J.A.M.A. 143: 982 July 15, 1950.)

On December 29th, 1950, student delegates from 48 medical schools attended the constitutional convention in Chicago; 13 schools ratified the constitution while the other delegates deferred ratification for 60 days in order to give schools from which they came opportunity to study it. By March 1951 all had accepted it.

It is interesting to note that the constitution and by-laws prohibit refusal of membership on the basis of race, religion, color or sex. Also, that David Buchanan of Huron, South Dakota, the U.S.D. Medical School delegate was elected treasurer. The A.M.A. paid the expenses of all delegates to this convention. The objectives of the association as stated at this convention were to advance medicine, contribute to the welfare and education of medical students; familiarize it's members with the purposes and ideals of the medical profession, and prepare its members to meet the social, moral and ethical obligations of the profession.

In 1952 David Buchanan, then at the University of Illinois was elected president of the 3rd annual meeting. He is now practicing in Huron having specialized in Obstetrics and Gynecology.

In January of 1952 the first issue of the Journal of the Student American Medical Association was circulated. This included an

editorial section; scientific articles, socio-economic articles and special features of interest to medical students and interns. In January of 1957 the name of the journal was changed to the New Physician: the Magazine for To-morrow's Doctors, This title more aptly describes the more than 50,000 medical students, interns and residents it is designed to reach.

The remarkable progress of this student organization is the result of cooperation and financial aid from the American Medical Association, particularly for meeting the expenses of chapter delegates to the national convention.

Mrs. Esther Howard
Medical Librarian

HISTORY OF S.D.S.M.A.

Continued from Page 125)

the association in 1945 appointed one of its members in each county to act as a local adviser to the representatives of the Field Army. These advisers were to assist the Field Army in any local educational program such as establishing county organizations for financial and educational purposes, carrying on school programs, distributing literature, and preparing public addresses. However, the greatest volume of the work was carried on by the Field Army itself.

The State Medical Association since 1955 has co-ordinated its efforts in the field of cancer control with the program of the South Dakota Division of the American Cancer Society.

At the present time [as of 1955] five members of the South Dakota State Medical Society are members of its Cancer Society's governing board. One member acts as Executive Chairman. It is the endeavor of the [Cancer] Society to disseminate true knowledge concerning cancer aid in research. A small fund is on hand for direct aid to some cancer patients.³⁰

30. South Dakota Journal of Medicine and Pharmacy, VIII (August, 1955), 293.

(To be Continued in May)

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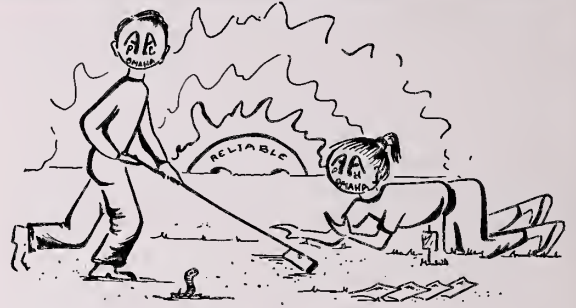
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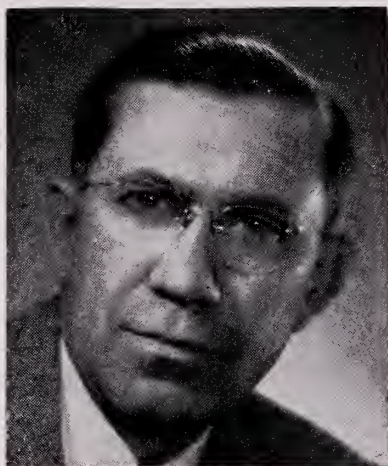
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PHYSICIANS CASUALTY & HEALTH ASSOCIATIONS
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P R E S I D E N T ' S P A G E



Dear Members:

Along with every great progress such as in transportation and fast vehicles problems arise where we have to meet them by building larger and straighter highways and more places to park cars. This is either up in buildings or down under the ground, and free-ways, and toll roads to solve the problems that we have created. Thus it is with the advance of medical progress.

We have extended man's life expectancy to the point where our proportion of the aged is getting greater year by year, and it creates a problem of how should we take care of them. We have gone into the study of geriatrics and the special care of elderly people with greater interest than we have before. Social problems with older people, and the support of these older people who have done so much in our past generation to bring us up to where we are, make it mandatory that we do something. The matter of homes for the aged is of great concern. It was noted that in this next year we have had a great deal of interest through churches, individual organizations, and individual enterprise in having homes for the old people. Before the year is out we note that we are going to have over 500 more beds or shall I say places for the care of old people in the state. Such as Watertown, Rapid City, Madison, and others too numerous to mention are doing a very fine piece of work along this line. In Brookings County an organization headed by Dr. Dean Austin is making plans to organize and develop facilities for the aged.

This subject of the aged was taken up at the Twelfth National Conference of Rural Health held at the Brown Hotel at Louisville Kentucky March 7th to the 9th. Dr. H. B. Hulholland, M.D. Chairman of Committee on Aging of the American Medical Association whose home is in Charlottesville, Virginia, gave us an excellent address entitled, "Rural Aspects of the Problems of The Aging." This problem is not peculiar to urban or rural population. This is something that we must all participate in. The medical profession has an intimate peculiar advantage point in being able to assist and take the leadership in promoting the care of the aging. I know that we all come to face with it every day. I trust that we will make an extra effort in doing our part to solve this problem.

Yours sincerely,

Alonzo P. Peeke, M.D.

Volga, South Dakota

ANNUAL MEETING PROGRAM

FIRST GENERAL SESSION SHERATON-CATARACT HOTEL BALLROOM

Monday Morning—May 20, 1957

Presiding Officer, A. P. Peeke, M.D., President

8:00 A.M.	Past-President's Breakfast — East Room, Sheraton-Cataract Hotel
8:55-9:30 A.M.	"Stress" Film-(Courtesy Pfizer Laboratories)
9:30 A.M.	Early Bird Attendance Award
9:30-10:00 A.M.	"Surgical Management of Peptic Ulcer" — Owen Wangensteen, M.D., Chief Dept. of Surgery, U. of Minnesota
10:00-10:30 A.M.	"Roentgen Examination of the Urinary Tract" — Earl Barth, M.D., Chicago
10:30-11:00 A.M.	Recess to view exhibits
11:00-11:30 A.M.	"Acute Vascular Emergencies in the Extremities" — Joseph M. Janes, M.D., Mayo Clinic
11:30-12:00 Noon	James K. Stack, M.D., Chicago
12:00- 2:00 P.M.	Noon Luncheons

SECOND GENERAL SESSION

Presiding Officer, M. M. Morrissey, M.D., President-Elect

2:00-2:30 P.M.	"Immediate Etiologic Diagnosis in the Convulsing Patient" — Larry Calkins, M.D., Kansas City, Missouri
2:30-3:00 P.M.	"Treatment of Carcinoma of the Cervix" — J. A. del Regato, M.D., Director, Penrose Cancer Hospital, Colorado Springs
3:00-3:30 P.M.	Recess to view exhibits
3:30-4:00 P.M.	"The Surgery of Occlusive Vascular Diseases in the Extremities" — Joseph M. Janes, M.D., Mayo Clinic
4:00-4:30 P.M.	Alimentary Tract Cancer" — Owen Wangensteen, M.D., U. of Minnesota
6:00 P.M.	Cocktail Party — Cataract Hotel
7:00 P.M.	Annual Meeting Banquet, Cataract Hotel — Featuring Clarke C. Crandall

THIRD GENERAL SESSION

Tuesday Morning, May 21, 1957

Presiding Officer, N. E. Wessman, M.D., Past-President of 7th District

8:50-9:30 A.M.	"Still Going Places" Film (Courtesy Pfizer Laboratories)
9:30 A.M.	Early Bird Attendance Award
9:30-10:00 A.M.	J. Earle Estes, M.D., Mayo Clinic
10:00-10:30 A.M.	"Communications in Medicine: On Medical Writing" — J. P. Gray, M.D., Detroit
10:30-11:00 A.M.	Recess to View exhibits
11:00-11:30 A.M.	Jerman Rose, M.D., Omaha
11:30-12:00 Noon	"The Office management of Common Ear, Nose and Throat Problems" — Benjamin Bofenkamp, M.D., Minneapolis
12:00- 2:00 P.M.	Noon Luncheons

FOURTH GENERAL SESSION

Tuesday Afternoon, May 21, 1957

Presiding Officer, W. A. Arneson, M.D., President 7th District

2:00- 2:30 P.M.	"The Management of the Infertile Couple" — Nicholas Fugo, M.D., Chicago
2:30- 3:00 P.M.	Jerman Rose, M.D., Omaha
3:00- 3:30 P.M.	Recess to view exhibits
3:30- 4:00 P.M.	Heart panel discussion — J. Earl Estes — Earl Barth — J. Donahoe



IMPROVING PATIENT CARE

The South Dakota Joint Committee for the Improvement of Patient Care has been a quiet, hard-working committee made up of representatives of the hospital, medical and nursing professions in the State.

One of their accomplishments, although unheralded, is the establishment of eleven recommendations for the improvement of patient care. These recommendations, now in the process of implementation by many of the hospitals in the State, follow:

1. That In-Service Programs be geared to the needs of all the workers in the hospital.
2. That more emphasis be placed on meeting the needs of geriatric and alcoholic patients in the Nursing School Curriculum.
3. That, in order to insure better patient care, communications among the nursing team and other hospital personnel be improved.
4. That a committee be appointed to compile a booklet containing the why's of procedures in simple, interesting language for the patient.
5. That Hospital Administrators, Board of Directors, and Doctors be encouraged to work with Administrators and Faculty of Schools of Nursing to prepare for National Accreditation.
6. That some method of follow-up be instituted whereby the patients will be contacted after discharge. If a home visit is non feasible, a letter might be used.
7. That general duty nurses be given more opportunities to attend workshops, institutes and meetings to insure better patient care.
8. That the findings of subcommittees of the Interdivisional Committee be used as a

basis for future planning for improvement of patient care.

9. That a study be made relative to the signing of a child's surgical permit, which has caused traumatic effects on the parents to determining if there might be other ways of carrying out this procedure.
10. That total care of the patients be our primary interest rather than routine care that hospitals have always felt was essential. That the nurse must understand the patient mentally, physically and spiritually in order to assist in his regaining health.
11. That some large hospital be encouraged to act as a pilot in setting up a Room for the Critically Ill equivalent to the present Recovery Room in order to determine its merits.

MEDICAL ASSISTANTS

A new organization met to get itself rolling on March 30th. Members of the new group term themselves "Medical Assistants" and are getting together to improve themselves on the job. Open to office nurses, receptionists, clerical personnel, technicians and hospital clerical personnel, the new Society gives every doctor's girl a chance to improve her service to the doctor.

If your office personnel hasn't joined or hasn't the information needed, have them drop a note to the executive office and it will be forwarded to officials of the Society.

This organization of Medical Assistants is endorsed nationally by the AMA and at the state level by the Council of the South Dakota State Medical Association.

S.D.S.M.A. HOBBY SHOW

The First Annual Hobby Show of the South Dakota Medical Association is to be held at the State Convention this year. We say its an Annual Hobby Show. We sincerely hope this will be true, but only your cooperation can make it so. Everybody has a hobby. Can you display yours? Do you carve, paint, collect, knit or what have you, we want your entry. The show will officially open Sunday evening May 19th. Bring your entries when you come to the convention. If you cannot attend, we want your entry anyway. Presidents of the local auxiliaries will take care of your entries, just contact them and they will see that your entry is displayed at the show and returned.

This will be our first Hobby Show. Bring as many entries as you like and make this first show a success so we can have many more. Attach the following coupon to your entry. Additional coupons may be secured from the auxiliary president in your area or at the show.

FIRST ANNUAL HOBBY SHOW

of the

SOUTH DAKOTA MEDICAL ASSOCIATION**SHERATON-CARPENTER HOTEL, ROOM 226, SIOUX FALLS, SOUTH DAKOTA****MAY 19, through 21, 1957**

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This is your MEDICAL ASSOCIATION

DR. A. P. REDING NEW SIOUX VALLEY PRESIDENT



Dr. Arthur Paul Reding, a practicing physician at Marion for 22 years was elected president of the Sioux Valley Medical association at the organization's 31st annual meeting at the Sheraton-Martin Hotel in Sioux City, February 26th. He succeeds Dr. E. W. Arnold of Adrian, Minn.

Dr. Reding, a native of Marion, studied two years at the University of South Dakota and was graduated from Creighton University, Omaha, in 1934. He interned at St. Joseph's Mercy Hospital in Sioux City in 1934-35 before beginning his practice in Marion.

He is secretary-treasurer of the South Dakota Medical Association, alternate delegate from South Dakota to the American Medical Association, a member of the national commission of membership and credentials of the American Academy of General Practice, past president of the Yankton District Medical society and vice-president of the Sioux Valley Medical Association.

Membership in the Association includes doctors from Minnesota, Iowa, South Dakota and Nebraska. The 3-day meeting included one day of clinical session at the Lutheran hospital and two days of lectures by speakers of outstanding medical authorities.

DR. D. J. BUCHANAN HEADS S.D.J.C.I.C.P.

Dr. David J. Buchanan, Huron, was elected president of the South Dakota Joint Committee for the Improvement of Care of the Patient, at the committee's annual meeting in Huron, March 20th.

The Committee is made up of representatives of the Medical, Hospital and Nursing Association. Attending

the meetings on behalf of the Medical Association in addition to Dr. Buchanan, were: **Drs. J. A. Muggly**, Madison; **C. F. Gryte**, Huron; and executive-secretary, **J. C. Foster**.

Jack Rogers, superintendent of Sioux Valley Hospital, Sioux Falls was elected vice-president with **Sister Amabalis** of Huron as secretary.

DR. J. M. JANES ANNUAL MEETING ORTHOPEDIC CHOICE



Dr. J. M. Janes, Mayo Clinic, has been selected by the program committee to be orthopedic speaker on the annual meeting program, May 20th. Dr. Janes will speak twice on the program

using as his titles "Acute Vascular Emergencies in the Extremities" and "The Surgery of Occlusive Diseases in the Extremities."

Dr. Janes was graduated at Western Ontario, did research work in Canada and then took a residency at the Mayo Clinic. He is now an orthopedic surgeon on the Mayo staff and is an assistant professor of Orthopedic Surgery in the Mayo Foundation, University of Minnesota.



del REGATO IS CANCER SPEAKER

Dr. Juan A. del Regato, Director of the Penrose Hospital, Colorado Springs, will be the featured speaker on the subject of cancer at the Annual Meeting of the State Medical Association, Monday, May 20th. His appearance on the program is arranged through the South Dakota Chapter of the American Cancer Society.

Dr. del Regato was born in Cuba, received his medical education in Paris and came to the United States in 1938, where he has held positions in Chicago, Washington, Baltimore, Columbia, Mo. and his present location.

CHILD PSYCHIATRIST ON ANNUAL PROGRAM

Dr. Jerman W. Rose, Assistant Professor in the Department of Psychiatry and Neurology at the University of Nebraska Medical School, will be a featured speaker on the 76th Annual Meeting

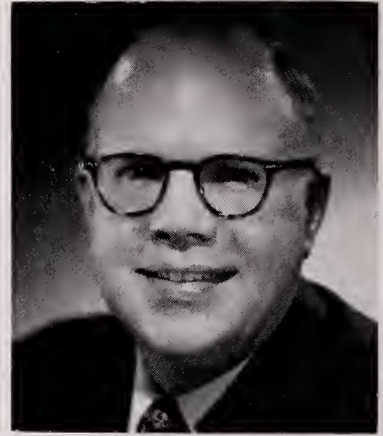


Program. He is scheduled to speak in the field of child psychiatry on the Tuesday program May 21st.

Dr. Rose is a graduate of Temple University, was director of the Oneida County Child Guidance Center, Utica, New York, and now serves as Clinical Director, Childrens' Services, at the Nebraska Psychiatric Institute.

MEDICAL WRITING IS NEW FEATURE OF ANNUAL MEETING

"Communications in Medicine: On Medical Writing" will introduce a new subject for annual meeting lectures, when Dr. J. P. Gray, Detroit, speaks Tuesday May 21st in Sioux Falls. Dr. Gray is a graduate of Johns Hopkins Medical School and is trained in epidermiology and public health. He has been con-



nected with the California Public Health Department, was director of the Hillsdale (Mich.) County Health Department for the W. K. Kellogg Foundation; was professor of Public Health and Dean of the School of Medicine at the University of Virginia; Dean of the Medical School, University of Oklahoma, and is now Director of Special Medical Services for Parke, Davis & Co.

AXEL H. CHRISTENSEN, M.D.

1869 - 1957

Dr. Axel H. Christensen, who at one time practiced medicine in Joliet, Illinois, and later moved to Clark, South Dakota died Tuesday March 5th, at Geneva, Illinois at the age of 87.

Born in Copenhagen, Denmark, June 13, 1869, he came to the United States at the age of 16. As a pre-medical student, he attended Valparaiso University and later went to Chicago to complete his medical studies at Rush Medical College. Following his graduation from medical school and his internship, he practiced medicine in Joliet,

Illinois in the 1890's. In 1910, Dr. Christensen moved to Clark, S. D. where he continued to practice until his retirement in 1953.

Dr. Christensen was a charter member of the Rotary Club in Clark and served as president for three years. He was a member of the Selective Service Board there during both World I and World War II, and received a Congressional citation for his services. Doctor Christensen was a member of the American Medical Association and the South Dakota State Medical Association.

Besides his wife, he is survived by a brother, Harold, of Copenhagen, Denmark; and a sister, Cornelia, of Denmark. Funeral services were held in Joliet, Illinois.

NEWS NOTES

The Board of Directors of the Faith Memorial Hospital announced that **Dr. Dzintar** of Philip opened his office at Faith Memorial Hospital on March 1st.

Dr. Dzintar will also move his family to Faith and set up his practice there.

* * *

Dr. Mary Price, Armour, is on a trip in Mexico under the auspices of the Experiment in International Living.

While in Mexico City, Dr. Price will attend the meeting of International College of Surgeons and at the request of the dean of the school of medicine of the South Dakota University will inspect the medical school facilities of the University of Mexico.

Dr. C. B. McVay, Yankton, spoke on "Hernia" at the regional meeting of the American College of Surgeons in St. Paul April 9th.

* * *

Dr. Robert Van Demark spent the week of March 11th in Chicago where he took a course on Facial Fractures and Surgery.

* * *

Dr. A. R. Scheffel, Redfield, attended a post-graduate medical course in Chicago, March 5th through 8th.

* * *

Dr. M. O. Pemberton was the featured speaker at the Deadwood Rotary Club Feb. 28th. He told about his early days of practice in the Deadwood area.

MEDICAL SCHOOL NEWS NOTES

Increased support for medical education in the state has been realized in the receipt of some \$21,000.00 from the American Medical Education Foundation and the National Fund for Medical Education. This money is to be utilized for operational activities of the medical school and will be in support of state appropriations. It has been particularly gratifying to note the increased numbers of contributors to the A.M.E.F. and correspondingly an increase in the designated contributions to the school.

* * *

- **Dr. L. C. Smith**, Assistant Professor of Biochemistry, has recently received a renewal of an existing research

grant in the amount of \$5,000.00 from the United States Public Health Service. Dr. Smith's project concerns the effects of existing cancer on the utilization of amino acids by the body tissues.

* * *

Lectures and laboratory instructions will be conducted by several University of South Dakota Medical school professors during the coming Summer Science Institute. Addressing the science group on bacteriology, pathology, anatomy, biochemistry, physiology, and pharmacology at various times, will be **Drs. Charles Cox, Amos Michael, Walter Hard, Edwin Shaw and Frances Kelsey**.

Dr. Cox will lecture on general, agricultural, medical and industrial bacteriology. Dr. Michael's talks will be about pathology and laboratory diagnosis and medical technology.

Dr. Hard will address the institute on the role of anatomy in human biology. Dr. Shaw and his staff will conduct three lectures on nutrition, enzymes and digestion, and blood chemistry. Dr. Kelsey's talks will be about general properties of physiology and pharmacology, economic poisons, and radioactive isotopes.

ALCOHOLISM IS CONF. SUBJECT

"The Treatment of the Alcoholic" will be the theme of a symposium on alcoholism for physicians to be held at the Center for Continuation Study, University of Minnesota, May 23-24, 1957. The symposium is sponsored cooperatively by the Univer-

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SAFETY: KYNEX offers a margin of clinical safety based on low required dosage, solubility, slow excretion rate. Although KYNEX Sulfamethoxypyridazine is a sulfonamide derivative and the usual precautions regarding such drugs should be observed, the low daily dose of 1.0 Gm. is all that is required for the therapeutic blood levels. No increase in dosage is recommended.

CONVENIENCE: The low dose of 1 Gm. (2 tablets) per day offers optimal convenience and acceptance to patients.

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sity and the Minnesota Department of Health. Featured speakers will include **Dr. Lorant Forizz**, medical director of the Florida Alcoholic Rehabilitation Program, who will speak on motivating the alcoholic patient and the treatment of alcoholics in groups.

Dr. R. Gordon Bell, director of the Bell Clinic, Willowdale, Ontario, will talk on the nature of alcoholism and the use of drugs in the follow-up treatment of the alcoholic. Dr. Bell is one of the developers of Temposil, a new drug which is used in helping alcoholics to remain away from alcohol.

Speaking on the use of the ataractic drugs in the treatment of alcoholism will be **Dr. Vernelle Fox**, medical director of the Georgian Clinic, Atlanta, Georgia, who has worked extensively with these drugs in the treatment of alcoholics.

Also on the program will be **Dr. Nelson J. Bradley**, superintendent, and **Dr. Lloyd Smith**, physician, of the Willmar State Hospital, Minnesota, and **Dr. K. W. Douglas**, superintendent of the Sandstone State Hospital, Minnesota.

The conference is open to all physicians but attendance will be limited to provide ample opportunity for group discussion. The registration fee for the course is \$5.00. Applications may be secured from the Center for Continuation Study, University of Minnesota, Minneapolis 14, Minnesota.

23rd ANNUAL MEETING

The 23rd Annual Meeting of the American College of Chest Physicians will be held at the Hotel Commodore, New York City, May 29 - June 2, 1957. The scientific program will include prominent speakers on all aspects of heart and lung diseases. In addition to formal presentations, there will be a number of symposia, round table luncheon discussions, seminars, and motion pictures.

Examinations for Fellowship in the College will be held on Thursday, May 30. On Saturday evening, June 1, more than 150 physicians will receive their certificates of Fellowship at the annual Convocation, which will precede the Presidents' Banquet.

Copies of the program may be obtained by writing to the Executive Offices, American College of Chest Physicians, 112 East Chestnut Street, Chicago 11, Illinois.

EDUCATION OF DIABETIC PATIENTS

The film "Urine Sugar Analysis for Diabetics," developed in cooperation with the medical profession, is available at no charge to the Medical and Allied Professions through Ames Company, Inc.


The film was made as a visual aid to be used in the education of diabetic patients and shows the relationship between carbohydrates and insulin. It also explains in lay language the

meaning of various diabetic conditions. It has been produced on 16 mm. in color and sound track with a running time of approximately 10 minutes. Appropriate "hand-out" literature accompanies the film.

Showings at Diabetic Clinics, Diabetic Lay Societies and other diabetic groups must be requested by the Medical or Allied Professions to Ames Company, Inc., Elkhart, Indiana or an Ames representative.

FREE CARDIAC SURGERY PROGRAM

National Jewish Hospital at Denver is expanding its cardiovascular program. It will consider applications for admission in behalf of patients suffering from cardiovascular defects amenable to surgical intervention, including mitral and aortic stenosis, congenital cardiac anomalies, etc. Definitive diagnosis is not necessary prior to admission, inasmuch as the hospital has a completely equipped cardio-pulmonary physiology laboratory for this purpose. Patients are accepted without respect to race, religion, or national origin, and without charge. Only those unable to pay for private care are eligible. Periodic reports are made routinely to the referring physician and the patient is directed to report to him after discharge. Inquiries should be sent to Medical Director, National Jewish Hospital, Denver 6, Colorado.

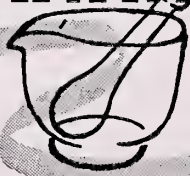


PHARMACEUTICAL SECTION

HAROLD S. BAILEY, PH.D.
EDITOR

Division of Pharmacy
College Station, South Dakota

PHARMACEUTICAL *Paper*



WHAT WOULD BEST IMPROVE INTER-PROFESSIONAL RELATIONS WITH MEDICAL MEN*

O. S. Trom**

Lisbon, North Dakota

"1. Medicine and pharmacy have worked so closely together over hundreds of years and are so closely associated in the minds of the public, that any disagreement or misunderstanding with respect to their functional relationship would be detrimental to the public interest as well as to the interest of the respective professions.

"2. Editorial comment in the lay press and feature stories in the popular magazines dealing with the exploitation of the patient by the professions, either individually or jointly, will contribute substantially to shaking public confidence in the system of private enterprise as applied to medical care.

"3. There is no good substitute for such statements as: 'the prime object of the medical profession is to render service to humanity; reward or financial gain is a subordinate consideration;' 'the ethical physician, engaged in the practice of medicine, limits the sources of his income received from professional activities to services rendered the patient;' 'it is unethical for a physician to participate in the ownership of a drugstore in his medical practice area unless adequate drugstore facilities are otherwise unavailable.' These statements have unfortunately been either discarded or so modified by recent actions of the

House Delegates as to shake the confidence of the pharmaceutical profession and the public in the basic attitude of the medical profession towards its professed Principles of Ethics.

"4. The adoption, as a principle, that 'it is not unethical for a physician to prescribe or supply drugs, remedies, or appliances as long as there is no exploitation of the patient', could be, and is, interpreted in some quarters as an invitation to the profession of medicine to embark upon an effort to eliminate the pharmacist as a dispenser of drugs.

"5. We respectfully submit that the dangers which flow from the encouragement of those who seek to have the physician relieved of the basic responsibility to 'recognize and promote the practice of pharmacy as a profession' as provided in Chapter VIII of the Principles of Ethics of the A.M.A. are so great as to warrant the most careful consideration on the part of your Council.

"6. It would be most unfortunate if even small segments of the medical and pharmaceutical professions were pitted against each other in open warfare against real or fancied grievances growing out of economic encroachment fostered by changes in the wording of ethical concepts. The avoidance of such a situation is the responsibility of both professions, and we pledge our best efforts in this direction. Knowing how great an influence is wielded by your Council over the determination of what is in the best interest

*Presented at the 1956 Meeting of District No. 5 National Association of Boards of Pharmacy and American Association Colleges of Pharmacy, Fargo, North Dakota.

**North Dakota State Board of Pharmacy.

of medical practice and the public health, we respectfully request that you give these observations your most careful and friendly consideration."

Gentlemen, you will all recognize this as the full text of the statement transmitted to the A.M.A. by representatives of the A.Ph.A., the N.A.R.D. and the A.M.A. with our own Frank Moudry acting as chairman. The action taken by this group is, without doubt, the biggest step ever taken by any group toward the promotion of a better relationship between our two great professions.

As an individual, I have no solution, and our gathering here today as a body has no solution to the problem. Everything that we say here today has been said again and again, but only by constant search and a re-examination of previous efforts can we hope to arrive at a workable solution. A fine beginning has been made by this group of courageous and resourceful men, and it will be our duty to get behind them with all the help we can possibly give them.

Big-stick Tactics Unworkable

As so many have said, we are living in the most dynamic era that the world has ever known. Revolutionary developments resulting in social, political and scientific changes affecting every man, woman and child in the world have in the past twenty-five years crept into every phase of our highly complex civilization. Changes are taking place at such speeds we can hardly keep up with them. Merchandising methods have been swept into oblivion over night with the advent of new and better ways of doing things. We in the profession of pharmacy have had certain fundamental concepts, and in the past few years many of these concepts have been shaken and some even changed. I am not so sure but that we are going to have to change more of these concepts before long. I think many of us are closing our eyes and are unwilling to accept a trend that has been creeping up on us for some time. I am sure we are facing changes fully as great as our forefathers did in the horse and buggy days. They, too, saw four-wheel contrivances going down the road, and at the same time said it could not be done. Yesterday we said it could not be done; today it is being done in spite of us. Pharmacists were almost the last group to change their method of operation. It took

the enterprising grocers to awake us in the ways of better merchandising. You might ask, what has all this to do with Inter-Professional Relations? Simply this, that we must change our entire concept of our relationship with the medical profession. And here we have learned a real fundamental truth, that big-stick tactics will not work in cementing better relationships. This has been adequately demonstrated in several states recently.

If there is need for a better relationship, then we must assume that neither the skirts of pharmacy nor those of medicine are spotless. And since we know that this is true, then how are we to go about making this improvement? First, there must be understanding. Each must understand the problems of the other. Each must give a little and be less adamant about its position. Surely, this is the time for clear, cool and collected thinking.

Dr. William B. Hildebrand, Immediate Past President of the American College of General Practice has treated this subject with good reasoning. I think we can well afford to heed his advice. He says he does not consider himself an authority or a referee, nor is he prepared to give a solution to our problems. But he does give some facts that refer to the problems as he sees them, along with some generalizations relative to what might be done as a solution. He further states that he is not in complete sympathy with the program of either pharmacy or medicine as it now stands, and only hopes that he might stimulate our thinking about this tremendously important problem.

Dr. Hildebrand believes that physicians have two major criticisms of pharmacy practices that stand out above all others. The first is counter-prescribing and counter-advice, which is specifically prohibited in Section VI of the Pharmacy Code of Ethics. We need no time on this point because we are all aware of the dangers connected with it. But he states emphatically that self-diagnosis is as harmful as counter-prescribing. And in the final analysis, anyone who aids in a self-diagnosis and prescribes therefor is not acting in the best interests of the patient as set forth in our code of ethics which states that, "as pharmacists, we hold that the welfare of the patron is the first consideration." The second major criticism was the wide disparity

in the cost of the same medication between various stores in the same community. Overhead and business management should not vary a great deal in any community. There is nothing that so undermines the confidence of the customer and patient, not only in his pharmacist but his doctor as well, as to find that he has been paying more for the same medicine in one particular drugstore in a community than he would pay for it in another. Public relations would not be improved if patients found that one pharmacy charged \$3.00 for the same prescription that could be had for \$2.00 several blocks down the street. This disparity in price is recognized as a real evil in some places, and steps have been taken, or are being taken, to remedy the situation. The North Dakota Pharmaceutical Association at its last meeting in 1956 agreed to accept the pricing schedule as set up by the Minnesota Association. All pharmacists in these two states are urged to use the plan. It is my understanding that so far the acceptance of this plan has been very gratifying. We hope that in the near future we can say that this particular hurdle has been cleared, and, unless they have already done so, we urge the other members of our district to take similar action.

Clinic or Group Practice Inevitable

Now a few words about the trend I mentioned a while back. We can, all of us here, present many facts and conclusions relative to the impact of the physician-owned pharmacy on the practice of pharmacy. I firmly believe, but I shall fight it as long as possible, that the trend toward group or clinic practice is inevitable, and will, in the future, necessitate total services including clinical psychologists, physical therapists, dentists, opticians, as well as the provision of basic drugs necessary for the needs of the patient. There are practices that we, as pharmacists, do not approve of, and we know that a good many medical men do not approve of some of the practices within their own ranks, but all of us are going to have to get used to the idea because that trend is sure and inevitable.

When we speak of possible solutions, we know that there are some things that we must not do. Certainly, a good inter-professional relationship is not fostered if pharmaceutical associations persist in raising money for the purpose of placing advertisements in news-

papers, writing threatening letters to executive secretaries of medical associations or otherwise stirring up and fomenting bitterness between our two professions. There is no doubt that such campaigns and threats were, in part, responsible for the change in the A.M.A.'s Code of Ethics in June of 1955, and we can only speculate on what the House of Delegates of the A.M.A. might do in subsequent sessions.

Materialism Strains Ethics

The cause of all the discord can be summed up in one word, "materialism." To borrow another quote, "We should not be so naive as to think that a minority in both professions who are responsible for our present differences are operating for the good of the patient or good of their profession. They are putting dollars and cents above ethics and service." The dollars and cents philosophy is not only prevalent in our profession, but in all phases of the changing world in which we are living. We are living in a swift and materialistic era in which the pursuit of the almighty dollar has placed a severe strain on the time-tested ethical principles of all the professions. As citizens, whether as pharmacists or doctors, we must move forward in this era, the most dynamic the world has ever known. But in doing so, we dare not and we need not sacrifice the ethical and moral principles upon which our profession and professional standards of the practice of pharmacy rests. The status of any profession is not a constant and perpetual entity. It varies from generation to generation and its rise or fall depends on the conduct of its members. Human frailties are such that adherence to a code of ethics can never be taken for granted. There are some who are always willing to cut corners and betray their professional principles for a handful of silver. In the history of almost every religion, government or profession, there have been times when corruption has been wide spread. Invariably this has occurred when the leadership has failed to support actively their ethical principles and failed to curb those who violated them.

If we are leaders in pharmacy, then we help it go forward as a proud unit, or it can drift down to a point where the public finds it difficult to recognize the difference between us and mere technicians or trades-

men. This distinction is one we must preserve by taking steps from within to curb those who have forgotten or neglected their professional responsibilities.

Each Profession Must Support the Other

Each of our professions is obligated by its own stature to respect and honor the calling of the other. Neither the fact nor the occurrence of incompetence, corruption, dishonesty or unethical conduct on the part of individual members of either profession can be tolerated. This means that each profession must vigorously support within its ranks as well as in the ranks of the other — those ethical concepts which each had found necessary in the public good. One who has chosen to be a physician or a pharmacist and has been found competent to be such by appropriate authorities, is vested with high responsibilities and privileges to enable him to serve the public with honor, with dignity and with effectiveness. Such a statement of ethical principles concerning pharmacy and medicine which would be universally used, could be a guide to the attainment of the best in inter-professional conduct and ethics. Such has been done between medicine and other professions and such has been done in a few isolated areas between pharmacy and medicine, and where it has been practiced, there are no inter-professional problems.

There is yet another reason why inter-professional relations should be stabilized. Some of us have sons who are studying pharmacy, some have sons who are actively engaged in the practice of pharmacy. Not only for our sons who follow in our footsteps, but for all future pharmacists and physicians, our relationships must be of the highest order.

In conclusion, may I suggest the following to supplement the work of Mr. Moudry and his committee:

1. Let us not take a defeatist attitude in spite of the fact that our efforts in the past have been pretty much a one-way street.

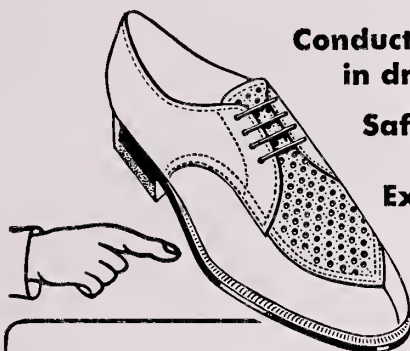
2. In every state, efforts should be made to set up a joint committee.

3. Make an attempt to have informal meetings for the purpose of discussing mutual problems.

4. Ordinarily speaking, the relations of physicians and pharmacists at the practice level are good. And since the biggest difficulty has been in the higher reaches of

organized medicine, or so it seems to me, then we, as individual pharmacists working in our individual capacities with the physicians in our neighborhood, should be able to soften medical attitudes to such an extent that better relations between the professions might in due course be possible.

5. If all physicians and pharmacists would adhere to their respective codes of ethics, there would be very little trouble. The problem then is what to do about those physicians and pharmacists who refuse to abide by the Code. I believe it is the responsibility of the pharmacists and physicians who do conform to the Code of their respective profession to cooperate in the endeavors that will induce those who do not to do so.



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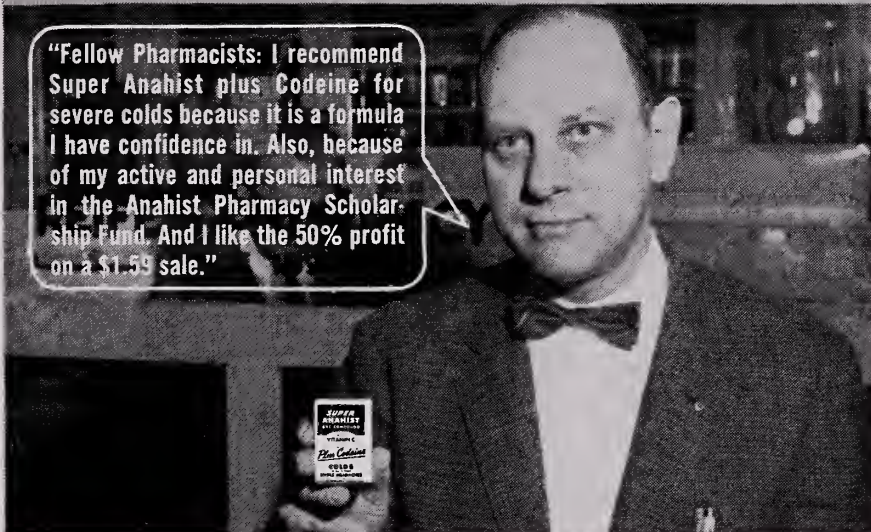


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Information available from Ken T. Eer Nisse, Local Secretary and General Chairman.

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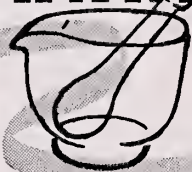
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PHARMACEUTICAL *Paper*



TEASPOON VERSUS THE FLUIDRAM*

S. J. Greco, Ph.D.**

Omaha, Nebraska

The topic which I have selected to discuss is not a novel one. It is being discussed merely to emphasize that a controversy concerning the point in question does exist.

We have all learned that one fluidram is equal to approximately 4 ml. and that one fluidounce contains 8 fluidrams. This statement cannot be refuted, since the fluidram and the fluidounce are definite units of measurement.

For several years many manufacturers of pharmaceuticals have recognized that one teaspoonful is more nearly equivalent to 5 ml. than to 4 ml., as evidenced by their labeling. The U.S.P. XV has made a similar statement. The latest edition of American Pharmacy has gone so far as to set up a new table of household equivalents. Among these new equivalents is the one that states that one teaspoonful equals 5 ml. Accordingly, it follows that one fluidounce contains 6 teaspoonfuls instead of eight.

Some of the pharmaceutical calculations books carry the statement that a teaspoonful is more nearly equal to 5 ml. than to 4 ml. Nevertheless, their calculations are still based on the premise that one fluidounce contains 8 teaspoonfuls.

*Presented at the 1956 Meeting of District No. 5 National Association of Boards of Pharmacy and American Association Colleges of Pharmacy, Fargo, North Dakota.

**Associate Professor of Pharmacy, Creighton University.

It may appear to some of you that this difference in the evaluation of the teaspoonful is insignificant. Perhaps, the point may be illustrated by studying the following prescription.

Codeine Sulfate	gr. $\frac{1}{8}$
Ammon. Chlor.	gr. V
Syrup Orange q.s.	dr. i
Mitte	oz. vi
Sig. dr. i t.i.d.	

The majority of pharmacists would type the label to read: "one teaspoonful three times a day" rather than "one fluidram three times a day", since it has been reduced to terms which are easily understood by layman.

Most of us would probably use 6 grains of codeine sulfate and dr. iv of ammonium chloride to fill this prescription. The justification for these amounts could be that the prescription was filled exactly as written. Consequently, each quantity was multiplied by 48 (6 x 8 dr. per ounce). However, the patient received the prescribed dose only if **exactly** one fluidram were taken.

In previous years, plastic spoons holding exactly one fluidram were issued with the appropriate prescription, in an attempt to solve the problem. Also, the pharmacist could suggest the use of a small calibrated medicine glass to measure the dose. These methods would have alleviated the situation if the public had used them faithfully; however, it appears that the public prefers the convenience of household utensils to measure medicine. It is true that not all teaspoons are

identical in capacity, but it is also probably true that most of them contain a volume nearer to 5 ml. than to 4 ml.

If the above prescription is studied from the viewpoint that the physician desires the patient to have the above prescribed doses each time that one teaspoonful of that prescription is taken, only $4\frac{1}{2}$ grains of codeine sulfate and 3 drams of ammonium chloride are required. This is obtained by multiplying each quantity by 36 (6×6 teaspoonfuls per ounce).

Only one of the above sets of answers can be correct. Which is correct? Personally, I am of the opinion that the calculations should be based on 6 teaspoonfuls per fluidounce, because I believe that the intent of the physician is being carried out more accurately.

We are all agreed that it does not make any difference pharmacologically, but as teachers and state board examiners, we cannot tell our students that either $4\frac{1}{2}$ or 6 gr. of codeine sulfate is correct or that any amount

between those figures is correct. In my opinion, this latter attitude would encourage carelessness, whereas we should be emphasizing accuracy and precision.

If we assume that the calculations should be based on 6 teaspoonfuls per fluidounce, how should the matter be handled by educators and state board examiners? Should our pharmacy calculations teachers use this method immediately or would it create utter confusion, since the other method is still being used in the pharmacy calculations texts?

I believe that the teachers should assume the initiative as soon as possible, rather than waiting for revisions of the pharmacy calculations books. However, it might be wise for pharmacy board examiners to accept both methods, until such time as the new method has been published in widely used pharmacy calculations books on account of possible differences in background of some of their candidates for licensure.



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PHARMACY ENROLLMENT DATA

The following data was obtained from a Report on Enrollments in Schools and Colleges of Pharmacy, prepared and released on December 14, 1956 by Louis C. Zopf, Chairman, Executive Committee of the American Association of Colleges of Pharmacy. It is being reprinted for the interest of South Dakota pharmacists through the courtesy of the National Association of Boards of Pharmacy.

UNDERGRADUATE STUDENTS—Fall Term, 1956

	Gross Enrollment in Continental U. S.		
	Men	Women	Total
Freshmen	3519	526	4045
Sophomore	4327	579	4906
Junior	3725	387	4112
Senior	3384	389	3773
Special	72	19	91
Total	15027	1900	16927

Analysis of Admission

	Men	Women	Total
New students (admitted directly from High School)	2596	381	2977
New students (previous college credits)	2064	256	2320
New students (total)	4160	637	5297

GRADUATE STUDENTS—Fall Term, 1956

Gross Enrollment in Continental U. S.

Men	Women	Total
605	50	655

A comparison of enrollment data, based on enrollment in the Continental United States for the current and preceding five years follows:

It may be noted that of the 5297 students who were admitted to colleges of pharmacy for the first time in the Fall of 1956, 2320 or 43.8% submitted records of having acquired some college training after graduating from

high school while 2977 or 56.2% had no more than a high school education.

The total undergraduate enrollment figure for the Fall of 1956, the highest total fall enrollment in all U. S. colleges of pharmacy since the Fall of 1951, represents a 1.6% increase over the enrollment of last year.

This year for the first time since the Fall of 1952, the freshman enrollment has decreased, it being somewhat less than it was in the Fall of 1955. The current freshman enrollment is, however, greater than it was in the Falls of 1951, 1952 and 1953.

Although students are not enrolled in Pharmacy at several institutions until reaching the sophomore level and although data about the number of college freshmen who may or may not be enrolled as prepharmacy students but contemplate a career in pharmacy was not obtained, it seems probable that the sophomore enrollment in 1957-58 will equal or exceed the current sophomore enrollment and that a greater number may be graduated in 1957 and 1958 than in 1955 or 1956.

MANPOWER DATA

The accompanying chart shows the present status of manpower for the pharmaceutical profession in selected states of the North Central area.

Presented in the first column of the accompanying chart are the number of pharmacists engaged in practice in each state on January 1, 1956.

The figures in the second column represent an estimate of the number of pharmacists that must be added to the profession annually to replace the number that will be lost to the profession through deaths and retirements. The replacement need is calculated to be 3.5% of the number engaged in practice as presented in the first column.

UNDERGRADUATE STUDENTS	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57
Freshmen	3823	3775	3866	4183	4327	4045
Sophomores	4863	4275	4112	4434	4820	4906
Juniors	4437	4202	3748	3609	3865	4112
Seniors	4491	4316	4024	3540	3533	3773
Special	55	71	49	16	133	91
	17,669	16,639	15,799	15,782	16,658	16,927
GRADUATE STUDENTS	514	596	570	612	602	655

	1	2	3	4	5	6
	Number Registered Pharmacists Engaged as such Jan. 1, 1956 (A)	Number Replacements needed annually 3.5 %	Number added to profession licensed by examination & Registered in 1955 (A)	POTENTIAL REPLACEMENTS ENROLLED IN COLLEGES OF PHARMACY (B)		
				For 1957 Senior Students Fall of 1956 (B)	For 1958 Junior Students Fall of 1956 (B)	For 1959 Sophomore Students Fall of 1956 (B)
Iowa	1536	53	90	86	83	134
Minnesota	1724	60	76	46	0	22
Montana	392	14	10	17	22	18
Nebraska	1270	45	38	40	69	77
North Dakota	278	10	32	51	73	68
South Dakota	456	16	33	51	57	97
Wisconsin	2206	78	75	91	96	84

A - Census and License Data Compilation, National Association Boards of Pharmacy Proceedings, 1956
B - American Association Colleges of Pharmacy Report on Enrollments, Fall Term, 1956

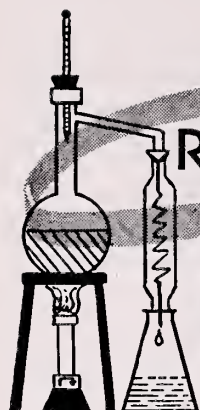
The number of pharmacists added to the profession in 1955 in each of the states is presented in the third column. These numbers include only pharmacists who acquired a license by examination for the first time.

In the states in which colleges of pharmacy are situated, the total number of students enrolled in each state as seniors, juniors, and sophomores are listed in columns four, five and six.

The number added to the profession each year is always slightly greater than the number graduated and in 1955 it was somewhat greater than the replacement need with the result that the number of pharmacists in practice on January 1, 1956 was greater than the number so engaged on the same date in preceding years.

It seems unlikely that the number that will be added to the profession each year may be much greater than the number needed for replacements for some time and it is believed that the number added in excess of the replacement need will not be in excess of the number needed to fill all of the positions for which the services of a pharmacists are required and sought.

Publicity is being given to the opportunities that are afforded to those who properly qualify for a career in pharmacy and it is to be hoped that the number that enroll in and graduate from the colleges of pharmacy will be sufficient to meet all demands for qualified pharmacists.



RECENT PHARMACEUTICAL *Specialties*

ULTRAN

Description: A new chemical 2-p-chlorophenyl-3-methyl-2,3-butanediol having a distinct tranquilizing effect.

Indications: Ultrtran is indicated when a mild tranquilizing or relaxing effect is desirable. In clinical practice, it combines smooth control of the chronically apprehensive patient with rapid relaxation, freedom from side-effects, and simplicity of use. When orally administered, Ultrtran quickly allays hyperexcitability, anxiety, and tension without dulling mental acuity or awareness. Psychological testing has demonstrated that Ultrtran in recommended dosage does not impair speed of fine movements, alertness, attention, visuomotor co-ordination, reaction time, or the more complex problem-solving faculties.

Dosage: Average dose is one pulvule (300 mg.) three times daily. When desirable, 2 pulvules may be administered before bedtime to promote a restful night's sleep.

How supplied: Pulvules Ultrtran, 300 mg., in packages of 100.

Source: Eli Lilly and Company.

MEPROLONE

Description: A combination of prednisolone, meprobamate and aluminum hydroxide gel in tablet form. It is marketed in two strengths. Meprozone-1 contains 1.0 mg. of prednisolone, 200 mg. of meprobamate and 200 mg. of dried aluminum hydroxide gel. Meprozone-2 contains 2.0 mg. of prednisolone in the same formula.

Indications: An antirheumatic, antiarthritic which simultaneously relieves muscle spasm, joint inflammation, anxiety and tension as well as discomfort and disability. The anti-inflammatory action is exerted by

the prednisolone while the meprobamate has the muscle relaxant action. The outer layer of aluminum hydroxide minimizes the gastric irritation often associated with steroid administration.

How supplied: Bottles of 100 in the two strengths.

Source: Merck Sharp and Dohme.

KETONIL

Description: A phenylalanine deficient dietary preparation consisting of a mixture of amino acids and minerals.

Indications: The mixture is designed for the treatment of phenylketonuric (phenylpyruvic oligophrenia). In phenylketonuria mental retardation and various other neurologic disorders are associated with the inability of the individual to metabolize phenylalanine properly. When these individuals eat a diet deficient in phenylalanine, the biochemical abnormalities are corrected and usually, but to widely varying degrees, the abnormal behavioral, intellectual and neurologic disorders are relieved. This mental disease accounts for approximately one per cent of all mental defectives.

From the limited number of cases so far studied marked improvement can be expected only if treatment is started in the early months of life. However, important behavioral changes, if not clear cut intellectual ones, and control of convulsions have usually occurred even in children of several years of age. Long term studies are under way to determine if greater improvement in these children would follow greatly prolonged treatment.

Dosage: Since the dosage depends on dietary control and individual requirements, the extensive literature of the manufacturer should be consulted.

Source: Merck Sharp and Dohme.

ENTEFUR

Description: Entefur Bolus Veterinary contains Furamazone 1 Gm. and bismuth subsalicylate 0.26 Gm. Furamazone is a new nitrofurane, brand of nifuraldezone. It is a yellow crystalline solid only slightly soluble in water as well as in most common organic solvents. It is a highly antibacterial compound effective against both gram-positive and gram-negative bacteria in vitro at concentrations of around 2 mg. per 100 cc.

Indications: Entefur is used in the treatment of bacterial diarrhea of calves (calf scours). It is relatively nontoxic to higher animals. Only a very small amount of the drug is absorbed from the gastrointestinal tract; this is rapidly broken down into inactive compounds and excreted. Much of the drug passes unchanged through the intestines in amounts sufficient to impart antibacterial activity to the feces. In infectious calf enteritis, Entefur reduces mortality by 85%. It is effective when milk substitutes are used.

Dosage: The average dose for calves: 1 Entefur Bolus Veterinary for each 150 pounds or less of body weight, twice a day for 2 days. The duration of treatment may be extended if necessary.

How supplied: Entefur Bolus Veterinary: box of 24 (6 envelopes of 4 boluses each). Through professional veterinary distributors.

Source: Eaton Laboratories, Norwich, N. Y.

NUGESTORAL

Description: Each tablet contains 15 mg. of ethisterone (Progestoral), 175 mg. of hesperidin complex, 175 mg. of ascorbic acid, 2 mg. of sodium menadiol diphosphate (vitamin K analogue), and 3.5 mg. of dl, alphatocopherol acetate.

Indications: Ten to twenty per cent of all pregnancies end in abortion, in many cases because of improper maternal environment. Nugestoral tends to preserve pregnancy in the abortion-prone patient by providing five agents known to contribute to fetal salvage and known to create an optimal environment for the maintenance of pregnancy. Ethisterone is of renewed importance to maintain and nourish the fetus, in addition to providing a specific relaxant

effect on the hyperirritable uterus. Hesperidin and vitamin C, acting conjointly, have been shown to preserve pregnancy by protecting decidual vessels through preservation of capillary integrity. In addition to its established value in preventing bleeding tendencies in mother and infant, vitamin K also prevents hemorrhagic diatheses commonly associated with habitual abortion. And vitamin E is usually employed as extra insurance in the nutritionally inadequate patient.

Dosage: It should be taken in a dose of three tablets per day, started as soon as pregnancy is diagnosed and continued throughout gestation.

How supplied: Nugestoral is supplied in boxes of 30 stripped tablets.

Source: Organon Inc., Orange, N. J.

LEUKERAN

Description: Leukeran brand of Chlorambucil (formerly known as C.B. 1348) is a derivative of nitrogen mustard.

Indications: For the treatment of chronic lymphocytic leukemia, malignant lymphomas including lymphosarcoma, giant follicular lymphoma and Hodgkin's disease.

Although Leukeran is not curative it produces remissions, some of which may be striking, in a substantial proportion of patients.

Leukeran has been found to be easier to handle than nitrogen mustard and some other related drugs because it produces fewer side effects and is not as damaging to the hemopoietic system in therapeutic doses.

Leukeran is issued as a sugar-coated tablet containing 2 mg. of the drug for oral administration. Complete information on dosage, available from the manufacturer on request.

How supplied: Bottles of 50 tablets.

Source: Burroughs Wellcome & Co.

MERCK USING A-B-X LABELLING

The Chemical Division of Merck & Co., Inc. is starting immediately to use the A-B-X labelling for narcotic preparations as requested of the pharmaceutical industry by the Federal Bureau of Narcotics. Company spokesmen say that shipments bearing these labels are already in transit to customers.

(Continued on Page 152)

P R E S I D E N T ' S P A G E



Fellow Pharmacists:

Did you sign and return your Anahist Scholarship Fund cards that came in the Super Anahist Plus Codeine deals? I for one did not until I got the second deal. Then I started figuring that if all the druggists of South Dakota would send in all their cards it would count up to quite a sizeable sum. All you have to do is sign and mail as the cards are all addressed and stamped ready for mailing. This deal runs from December 1, 1956 to December 1, 1957, so if we all send in our own cards and encourage others to do the same, some future pharmacist will be helped. For more details see advertising page 12 in the February issue of this Journal.

How many of you get the American Legion magazine? If you do, be sure to read the article on pharmacy on page 16 of the March issue. And if you don't, borrow one from a friend as this is an article all pharmacists should be proud of.

Better start making plans to attend the Pharmacy Convention in Rapid City this coming June. They have an interesting program arranged.

Al Knutson, President

Rx PHARMACY News

HONOR SOCIETIES ELECT PHARMACY STUDENTS

In recognition of outstanding scholarship and professional ability in pharmacy **Merle Amundson**, Colton; **Dewey Folkestad**, Brookings; **Rodney Honner**, Geddes; and **Kenneth Weber**, Murdo, were elected to membership in the Rho Chi Pharmaceutical Society. The new members were inducted into the organization at a banquet meeting March 4.

To be eligible for this honor a student must have a B average and have completed 122.5 credit hours of work in pharmacy and be elected upon ballot by the society membership.

Mary Lou Scheurenbrand, Mitchell; **Ruth Kohlmeyer**, Brookings; and **Wyman Rude**, Amery, Wisconsin, achieved the highest academic honor given at South Dakota State College recently. The senior pharmics were elected to membership in the Phi Kappa Phi National Honor Society. This award is given only to students in the upper six percent of the senior class who have a grade point average of 3.25 or better (all A's is 4.0 and all B's is 3.0) and who are elected by the faculty and student members of the organization.

PHARMACEUTICAL INSTITUTE HELD APRIL 9-10

The annual refresher course for South Dakota pharmacists was held April 9-10 on the campus of South Dakota State College.

Sponsored by the Division of Pharmacy in cooperation with the South Dakota State Pharmaceutical Association, the two day seminar was at-

tended by approximately 50 pharmacists.

Included in the program was material on the scientific and economic aspects of the pharmaceutical profession as well as talks on public relations and the 1957 South Dakota Legislative Session.

The complete program included:

Tuesday, April 9

1:00- 1:30	Registration, Faculty Lounge, Union Building
1:30- 2:00	Welcome.....Dr. John W. Headley President, South Dakota State College
	Welcome.....Al Knutson President, South Dakota Pharmaceutical Association
	Opening Remarks.....Dr. Floyd J. LeBlanc Dean, Division of Pharmacy
2:00- 3:00	Merchandising and Advertising of the Animal Health Department.....R. D. (Dick) Watson Assistant General Sales Manager Globe Laboratories, Fort Worth
3:00- 3:15	Coffee Break
3:15- 4:00	Question Period.....R. D. (Dick) Watson
4:00- 5:00	Let's Keep the Vitamin Business.....Blair Vickerman Division Manager E. R. Squibb & Sons, Minneapolis
5:00	Group Picture
6:30	Dinner, Union Ballroom
	You and Your Public.....Donald T. Meredith Director Trade and Guest Relations The Upjohn Co., Kalamazoo

Wednesday, April 10

8:45- 9:45	Pediatric Medicine.....Walter H. Patt, M.D. Pediatrician, Brookings Clinic
9:45-10:45	South Dakota Prescription Survey 1956Harold S. Bailey, Ph.D. Associate Professor of Pharmaceutical Chemistry
10:45-11:00	Coffee
11:00-12:00	Surface Active Agents.....Norval E. Webb, Ph.D. Assistant Professor of Pharmacy
12:00- 1:00	Luncheon, Room 303, Union Building
1:00- 2:00	Tranquilizing Agents.....Guilford C. Gross, Ph.D. Professor of Pharmacology
2:00- 3:00	The 1957 Legislative Session.....Bliss Wilson Secretary, South Dakota Pharmaceutical Association
3:00- 3:30	Summary and Discussion.....Guilford C. Gross

LILLY HOSTS 100 STUDENT PHARMACISTS



Junior and senior students of the South Dakota State College Division of Pharmacy visited Eli Lilly and Company pharmaceutical manufacturers March 16-20. While guests of Lilly, they inspected the Lilly Research Laboratories and toured the pharmaceutical, biological and antibiotic production facilities. Approximately 100 students and their wives enjoyed the hospitality of the

Indiana firm.

Representing the faculty with the group was **Dr. and Mrs. Kenneth Redman**. Dr. Redman is Professor and Head of the Department of Pharmacognosy at State College.

Mr. and Mrs. Donald Turgeon, Lilly representative in eastern South Dakota, also accompanied the group to Indianapolis.

WOMEN'S PHARMACY GROUP NAMES OFFICERS

Faye Stephens of Belle Fourche has been named to head the slate of officers elected by the Chi Chapter of Kappa Epsilon, national women's pharmacy fraternity.

Other officers are vice-president, **Mary Vande Voorde**, Chamberlain; secretary-treasurer, **Connie Teig**, Highmore; and historian,

Connie Warner, Aberdeen.

Faye Stephens and Mary Vande Voorde were elected delegates to the National Convention of Kappa Epsilon which is to be held at Madison, Wisconsin in May.

The fraternity recently organized at State College is open to all women pharmacy students who maintain a "C average" in their courses. **Professor and Mr. Guilford C. Gross** are faculty advisers for the local group.

PHARMACEUTICAL SPECIALTIES—

(Continued from Page 149)

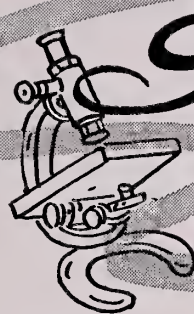
The letters designate three classifications under Federal Narcotics regulations: Class A refers to taxable narcotics under full control; Class B refers to taxable narcotics permissible on oral (verbal) prescriptions; and Class X to exempt narcotic preparations.

The Company believes that the system will be highly advantageous to its customers. The pharmacist can tell at a glance by the large blocked letters on the labels the exact classification under which the preparation falls. Wholesalers can also readily separate and distribute narcotics into potent (Class A) and semi-potent (Class B) stocks.

MOTION PICTURE AVAILABLE FOR PHARMACISTS

A full-color motion picture, "Going Our Way?", with a Hollywood cast, is available free for pharmacists in this general area to show to their service clubs, high schools or any laity groups.

L. S. Flanedy, Minneapolis branch manager for Parke, Davis & Company, sponsors of the film, announced that the non-technical and dramatic 29-minute film is ready for any pharmacist in the region who can arrange a showing.



Scientific

PAPER

UPPER GASTROINTESTINAL COMPLICATIONS OF NEUROLOGICAL DISEASE

By John B. Gregg, M.D.
Sioux Falls, South Dakota

The possibility of upper gastrointestinal ulcers as a complication in patients with cerebral affection was first described about one hundred years ago. (von Rokitsansky, Jager, Imlach)¹ However, it was not until about 1932 that attention was again focused on this subject by Harvey Cushing ²3)4. Doctor Cushing postulated that peptic ulcers are related to diseases involving the "inter-brain." Recent investigations ⁵) indicate that disturbances of other portions of the central nervous system, especially those involving the vegetative nervous system, may be accompanied by peptic ulcers.

Upper intestinal ulcers are always a hazard in neuro-surgical cases which often are unconscious either on admission to the hospital or in the post operative period. The ulcers which accompany cerebrospinal or vegetative nervous system disease may be recurrences of previous ulcers or new lesions. For this reason the likelihood of peptic ulcers or their sequellae must be anticipated during the treatment of neurological disease because they may be unannounced until they bleed or perforate.

Interest in this problem was stimulated by the appearance of upper intestinal ulcers in twelve patients on the neurological surgery service of the University of Iowa Hospitals during an eighteen month period. (See Table #1) Of these cases ten ulcers appeared following intracranial operations, one followed ventriculograms which were performed because

of suspected metastatic brain tumor, and one appeared after left lumbar sympathectomy. In three cases peptic ulcers perforated in the post operative period. One of the perforations was suspected ante-mortem and the ulcer was closed surgically but the patient died of shock and peritonitis. In the two other cases no sign or symptom suggesting a perforated viscus appeared and an ulcer was not suspected. One of these patients had been operated upon twice for a recurrent brain tumor prior to his last admission. He died shortly after admission and at post mortem perforated duodenal ulcers with generalized peritonitis were found. A fourth patient died after massive hemorrhage when a duodenal ulcer eroded into the pancreaticoduodenal artery. Several small superficial ulcers were found in the distal esophagus in another patient but no symptoms referable to these were noted prior to death. Six patients died following repeated bouts of hematemesis from ulcers but in each instance the bleeding responded temporarily to supportive therapy. One patient was alive after several bouts of massive upper intestinal bleeding.

Although there are many clinical reports and experimental investigations, ⁶7)8)9)10)11)12)-13)14)15) to date there is no conclusive evidence as to the exact mechanism of this syndrome. Clinical observers ¹⁶17)18) have reported upper gastrointestinal lesions associated with the following nervous system diseases: 1) Tumors involving all portions of

TABLE NO. 1 NEUROSURGICAL CASES WITH PEPTIC ULCERS

Case Number	Sex	Age	Major Disease Process	Central Nervous System Findings	Previous History of Peptic Disease	Gastro-intestinal Findings	Outcome
1	Female	44	Rupt. Parasellar aneurysm	Infarction, Rt. Temporal Lobe	Questionable	Perf. duodenal ulcer, ulcerative esophagitis	Operated for perf. ulcer Died. P.M.
2	Male	60	Occlusive vascular disease, legs	Lumbar sympathectomy done	Probable	Perf. duodenal ulcer	Died P.M.
3	Male	10	Ependymoblastoma, Rt. Post. Occipital Post-op. 2 x and Post X ray	Widespread right intracerebral tumor	None	Two duodenal ulcers, one perforating into pancreas. Duo-	Died P.M.
4	Male	4	Medullablastoma, 4th Ventricle.	Hydrocephalus, cerebral edema, generalized.	None	denal ulcer eroding into pancreas.	Operated, Died P.M.
5	Male	67	Infiltrating glioblastoma, Rt. frontal	Infarction of Pons, Cerebral peduncles, basal ganglia and Rt. Hemisphere.	None	Acute membranous esophagitis	Decompression Died P.M.
6	Female	49	Glioblastoma, Rt. Parietal and Temporal areas.	Widespread Rt. hemisphere tumor. Localized meningitis in operative area.	None	Intra-gastric hemorrhage and areas of focal gastritis.	Decompression Died P.M.
7	Male	22	Cerebral trauma, recent	Cranio-cerebral trauma, frontal and left temporal	None	Intragastric hemorrhage, acute esophagitis with ulcers, lower one-third.	Decompression Died P.M.
8	Female	41	Schizophrenia, Trans-orbital leuotomy	Hematoma, Rt. frontal area.	None	Severe intra-intestinal bleeding, requiring transfusions	Cerebral Bleeder ligated. Discharged Improved
9	Female	61	Breast carcinoma, 2 yr. post operative	Metastatic adenocarcinoma in cerebellum	None	Severe in-traintestinal bleeding necessitating transfusion.	Biopsy Decompressed Died. no P.M.
10	Male	70	Astrocytoma, Rt. temporo-parietal area.	Infiltrating glioma, Rt. temporal lobe	None	Several small, superficial ulcers in distal one third of esophagus.	Decompression, Died P.M.
11	Male	67	Bronchogenic CA, left upper lobe	Metastatic lesions in dura, cerebral cortex, both adrenals .	None	Three small ulcers in duodenum	Ventriculograms, Died, P.M.
12	Male	50	Organic psychosis	Cerebral atrophy and degeneration, Rt. Temporo-parietal area with Gliosis.	Previous stomach ulcer	Pyloric ulcer with intragastric hemorrhage	Decompression, Died, P.M.

the cerebrum, cerebellum, brain stem, pituitary and meninges 19)20)21)22)23); 2) Head trauma and with birth head injuries in infants 24)25)26)27); 3) Meningitis, both tuberculous and non-tuberculous 28); 4) Syphilis involving the central nervous system 29)30); 5) Hypertension and hypertensive encephalopathy 31); 6) Intracranial hemorrhage and thrombosis 31); 7) Brain abscess 32); 8) Spinal cord injury 13); 9) Hydrocephalus 33); 10) Multiple sclerosis 32); 11) Intracranial operations 34)35)36); 12) Sympathectomy in the thoracic or lumbar area 37)38)39); 13) Anterior poliomyelitis 40); 14) After radiation therapy of the pituitary gland 41).

Although originally it was postulated by Cushing and others 42) that the peptic ulcers result from abnormal stimulation of the parasympathetic system at the hypothalamic nuclei, the experimental data indicates that these ulcers are associated with alteration in the function of the vegetative nervous system, either centrally or peripherally. The original investigators felt that vagal impulses caused vascular spasm and subsequent ischemia in portions of the foregut 43). Breakdown of the mucosa was thought to follow, resulting in ulcer formation. However, a similar situation is produced by overactivity of the parasympathetics elsewhere following removal or reduction of the effect of the sympathetic system. This was illustrated by Durante 44) who observed ulcerating lesions following bilateral resection of the splanchnic nerves. Keppich 45) and Stanke 46) produced experimental ulcers by repeated vagal stimulation. Post-operatively following Smithwick sympathectomy operations for malignant hypertension Blegen and Knutner 47) observed two patients in whom there was aggravation of pre-existing gastric ulcers. Maggi, Meeroff and Segal 38) and Lockwood and Higgins 39) also reported aggravation of duodenal ulcers following sympathectomy. A contrary opinion was expressed by Hightower, Morlock and Craig 37) who reviewed 963 cases in which ganglionectomy and splanchnic resection were done, all but one for the relief of hypertension. Twenty-one cases had concomitant ulcers, fourteen of which existed before operation and seven which appeared afterwards. They concluded that sympathectomy as done by them for the relief of hypertension did not influence the clinical

course of peptic ulcers. Symptoms were not altered after sympathectomy and the patients appreciated ulcer pain as well as preoperatively. This was attributed to the fact that sympathectomy does not completely denervate the stomach of its sympathetic nerve supply.

Tuta and Batko 48) noted three cases with peptic ulcers following Metrazol convulsive therapy for involutional melancholia and two similar cases were seen by Moore and Friedman 49). Polack and Kreplik 50) reported the results of 2,000 necropsies performed on patients in mental institutions and found incidentally 42 cases with peptic ulcers (2.1%). They concluded, in view of the fact that peptic ulcers are reported in from 1.3% to 9% of autopsy specimens from general hospitals, that there is no significant increase of ulcers in the psychotic and mentally defective as compared to the general population.

In 2,301 consecutive autopsies Gibbs 32) found 219 cases with peptic ulcers. Of these there were 13 cases which also had central nervous system pathological findings. Eight ulcers were associated with apoplexy and one case each was associated with thrombosis of the sigmoid sinus, cerebellar abscess, brain contusion, encephalitis and multiple sclerosis. However, in this series many other systemic diseases were found to be present along with peptic ulcers. Fletcher and Harkins 51) demonstrated 42 cases of acute peptic ulceration in a series of 4,102 autopsies and found that these lesions occur in cases which had major trauma or surgery as well as in patients with brain damage. Acute ulceration concurred with brain damage in 9 instances, with major surgery or trauma in 6 cases, and with other diseases in 27 cases.

Reviews of the literature as pertains to the subject of peptic ulceration associated with central nervous system disease have been presented by Ivy, Grossman and Bachrack 52), Picard, Charbonnel and Giraudet 53), and Saar 27) and Planck 54). In 1949 Tartarini 55) compiled a very complete paper on the clinical and investigational information available at that time. Schlumberger 56) discussed this subject as relates to infancy and childhood and postulated that both a neural and an hormonal pathway exist for the formation of such ulcers. He feels that either or both pathways may be instrumental in the produc-

tion of ulcerated lesions in the upper alimentary tract.

Selye 57) has postulated that the gastrointestinal ulcers which appear following severe burns (Curlings ulcers), similar to those under consideration, may be a part of the "alarm reaction." He feels that acute peptic ulcers are a definite part of the adaptation syndrome and have an hormonal component in their formation. Herbut 58) also noted acute ulcers following distant operations.

Nedzel 59) produced ulcers in 37% of sixty-two dogs by the intravenous administration of pitressin. Berg 60) also reported a similar study. In the past numerous ulcers have been noted in patients with pituitary tumors. 61)62)63)64)65)66)67)68) Habif, Hare and Glaser 69) and Smyth 70) reported complications of peptic ulcers following the administration of ACTH. Other reports have showed activation of ulcers while using cortisone. Metz 71) and Luckey 71) reported healing of peptic ulcers by using posterior pituitary extract. Three hundred eleven out of four hundred eighteen cases were benefited. They contended that this drug aids in the healing of ulcers by regulating the tone of smooth muscle. Feidman and Podolski 72) reported healing of experimental ulcers with prolactin and Garson 73) noted successful therapy of peptic ulcers with extracts of the pineal gland and tuber cinereum.

Despite the fact that peptic ulceration either as an aftermath of central nervous system insult or coincidental therewith has been discussed frequently in the past and is quite widely recognized, cases are still missed clinically and found incidentally at the autopsy table. Non-recognition or delay in recognition of this complication may terminate fatally. In many instances the delay is due to misinterpretation of the clinical findings. This is especially true in an unconscious patient. Because this complication is seen quite often in patients with neurological disease it is important to emphasize constant awareness, early recognition and prompt therapy if symptoms suggesting an ulcer appear.

To determine the prevalence of gastrointestinal ulcers occurring concomitantly with diseases involving the central nervous system at the University Hospitals, the results of 3,739 consecutive necropsies were examined.

In this series of autopsy cases there were 69 gastric ulcers, 78 duodenal ulcers, 108 cases with the pathological diagnosis of esophagitis and 45 cases with significant gastritis. The total number of gastric and duodenal ulcers (147) represents 3.9% of the total autopsies, agreeing quite closely with the statistics from other series.

Nine hundred seventeen cases (24%) had some form of neurological disease (see Table #2). In 659 (17%) cases the neurological lesion was the primary disease causing the patient's death and in the remainder the neurological disease was an incidental or secondary finding. There were 47 (1.3%) autopsy cases with neurological lesions in which esophageal, gastric or duodenal ulcers were found concomitantly. The central nervous system lesion was the primary cause of death in 43 of these cases. The ulcers were a concurrent factor in 21 instances. Three stomach ulcers and ten duodenal ulcers perforated. Three stomach ulcers, three duodenal ulcers and two esophageal ulcers bled. (See Table #3) Multiple ulcers were found in eleven cases. Gastric and duodenal ulcers were found in 3 cases; gastric and esophageal ulcers were both present in 2 cases; multiple duodenal ulcers were found in 6 cases. Four duodenal ulcers were present in two cases and two separate ulcers were found in four cases. In four cases the ulcer found at necropsy was the reactivation of a previous ulcer. In 13 other cases with cerebral disease there was evidence of recent hemorrhage into the upper intestinal tract but no definite ulcer was demonstrated at post mortem.

In this series and in other series reported in the literature there was no special age predilection for this disease complex. The age range here was from 16 days to 76 years. In this series ulcers were twice as common in males as in females. There was no special distinguishing pathological feature of the gastrointestinal lesions, both acute and chronic lesions being found. The type and location of the insult to the central nervous system was extremely variable. The time interval between the onset of the neurological damage and the appearance of symptoms of the intestinal ulcer or the finding thereof at necropsy was quite variable.

DISCUSSION

A review of the clinical and experimental

TABLE NO. 2

NEUROLOGICAL DISEASE	Primary Disease	Secondary or Incidental Disease	Total	ULCERS				Evidence of Hemorrhage, Upper G I
				Esophageal	Stomach	Duodenum	Esophagitis	
Meningitis	47	33	80	2		1	1	2
Meningitis, TBC	20	2	22			2		
Poliomyelitis	79		79	1		1	3	3
Encephalitis	10	3	13				1	
Brain abcess	10	19	29	2	1	1		
Syphilis	18	12	30		1	1	1	
Intracranial Hem.	21	38	59			2	1	2
Vascular thrombosis	44	37	81	1	6	7	2	1
Subdural and subarach hemorrhage	8	6	14				1	
Infants, intracerebral hemorrhage	27		27	1				
Infants, subarach and subdural hem.	73		73				2	1
Cerebral trauma	40	2	42	1	1	1	1	1
Intracranial aneurysm	29		29	1		1		
Tumors, anterior fossa	67	22	89	4		1	2	1
Tumors, post. fossa	24	5	29			2		1
Tumors, Meningeal	24	13	37	1			2	
Tumors, pituitary	14	17	31	1		1	1	
Degenerative cerebral diseases	9	27	36		1			
Congenital deformity	43	4	47				2	1
Neuronitis	5	3	8	1			1	
Periarteritis nodosa	9		9					
Myesthenia gravis	2		2					
Multiple sclerosis	3		3					
Post operative	19		19			1		
Spinal cord trauma	7		7					
Spinal cord tumor and degenerative disease	7	15	22			1		
Totals	659	258	917	15	10	22	21	13
				Total ulcers				47

TABLE NO. 3

ULCERS

Central Nervous System Lesion	Esophagus				Stomach				Duodenum			
	Chronic	Incidental or	Bleeding	Perforation	Chronic	Incidental or	Bleeding	Perforation	Chronic	Incidental or	Bleeding	Perforation
Meningitis	1		1									1
Meningitis TBC									1			
Poliomyelitis	1											1
Brain Abscess	2				1		1					
Syphilis					1				1			
Intracranial Hemorrhage												2
Vascular Thrombosis	1				3		1	2	4		3	
Cerebral Trauma	1						1					1
Intracranial Aneurysm	1											1
Tumors, Ant. Fossa	3		1									1
Tumors, Post. Fossa												2
Tumors, Menin- geal	1											
Tumors, Pitui- tary	1											1
Degenerative Cerebral dis.								1				
Congenital Deformity	1											
Spinal Cord Tumor and Degenerative dis.										1		
Post Operative										1		

data pertaining to the symptom complex of upper alimentary ulcers associated with diseases involving the central nervous system had been presented. The exact cause of this syndrome is not apparent but available information indicates that insult to the cerebrospinal or vegetative nervous system in almost any form, especially when associated with abnormal stimulation of the parasympathetics or depression of the sympathetics, may be complicated by peptic ulcers. In some cases healed ulcers are reactivated while in others the ulcers are new and their appearance can be correlated with the onset of the central nervous system insult. Early investigators attributed the ulcers to abnormal nerve impulses from the hypothalamus to the gut mediated by the vagus nerve. Recently Selye, Schlumberger and others have postulated the presence of an hormonal route as well as a neural route for the production of ulcers following central nervous system or other bodily injury. The clinical and experimental reports indicate that there is an important hormonal relationship in the healing as well as the production of peptic ulcers.

In view of the reports of the formation or aggravation of pre-existing ulcers by the adrenal cortical hormones it would appear that these endocrine secretions are at least a factor which also plays a part in the ulcer formation. This is probably due to hormonal stimulation which causes increased gastric secretion. It is likely that both pathways are important in the formation of the upper intestinal ulcerations in patients having lesions in the central nervous system. The fact that peptic ulcers are found in patients with other systemic disease, without apparent affectation of the central or vegetative nervous systems would suggest that the hormonal pathway may be more important in the production of the intestinal lesions than is the neural route. It is entirely possible that the fact that these lesions are seen quite frequently with cerebral or vegetative system dysfunction is due to hormonal alteration brought on by neural abnormality.

This complication of cerebral, spinal or vegetative nervous system affectation must be repeatedly emphasized because it is a potentially serious accompaniment. In the patient with damage to the central nervous system, symptoms which might suggest the

presence of gastrointestinal ulcers or their sequellae are often lacking. If there are symptoms or findings suggesting pre-existing intestinal disease the complication of hemorrhage or perforation may be anticipated and treated promptly should it appear. The inability to report pain is one of the most frequent causes of delay in diagnosis. For this reason the possibility of an ulcer must always be suspected after injury to the central nervous system if there is any unaccountable change in the vital signs. Bleeding ulcers are usually first indicated by hematemesis or tarry stools. Either of these signs demands immediate investigation. Treatment of bleeding should be conducted as in a conscious individual. Although bleeding ulcers usually respond to supportive therapy, surgical intervention may be necessary in intractable cases. If intestinal perforation is suspected, X-Rays of the abdomen for free air are indicated. A perforated ulcer demands immediate surgical intervention. In any event, prompt therapy should be instituted if changes in the vital signs appear and physical examination suggests intestinal lesion.

CONCLUSIONS

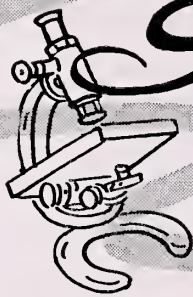
I. Esophageal, gastric or duodenal ulcers or complications thereof are a hazard in patients with neurological disease. They are most treacherous because their appearance may be unannounced in an unconscious patient. Failure to recognize this complication early often results in a fatal outcome.

II. Upper intestinal ulcers may appear following insult to the neuroaxis in almost any area, especially if there is injury to the vegetative nervous system. The insult may be neoplastic, vascular, traumatic, infectious, degenerative, developmental, post irradiation or post-surgical.

III. In this series of general autopsy cases, peptic ulcers were found appearing concomitant with neurological lesions in 47 instances (1.3%). In 37 there was correlation between the onset of the nervous system insult and the appearance of the ulcer. The ulcers were a concomitant cause of death in 21 cases.

IV. Many clinical and experimental studies have been reported concerning this subject. Evidence available indicates that there is both a neural and a hormonal route by

(Continued on Page 187)



Scientific

PAPER

SUBCUTANEOUS EMPHYSEMA FOLLOWING TONSILLECTOMY EDMOND J. McGREEVY, M.D., F.A.C.S. JOHN V. McGREEVY, M.D., F.A.C.S. Sioux Falls, S. D.

We wish to report an unusual case of Subcutaneous Emphysema of the face, neck and thorax following tonsillectomy. Although the patient recovered, the sudden appearance of widespread subcutaneous emphysema caused some alarm and we wish to bring the condition to the attention of other physicians who may encounter this unusual, but not rare, complication.

CASE HISTORY

Mr. F. K., age 16 years, was admitted to McKennan Hospital on December 28, 1956, for tonsillectomy. Past history was negligible, except for numerous sore throats and bouts of acute tonsillitis. The physical examination revealed enlarged tonsils in a well developed male of some 220#. Laboratory studies of the blood and urine were normal. Preoperative medication consisted of M.S. gr. 1/6 & Atropine gr. 1/150 given subcutaneously forty-five minutes before the operation.

Anaesthesia was general by means of an endotracheal tube. Tonsillectomy was performed using snare technique. Bleeding was considerably greater than usual, in fact one hour and 15 minutes were required for this seemingly minor procedure. Two hours after surgery, swelling was noted on the right side of jaw but patient was not bleeding. Three hours after surgery the patient was examined because of the aforementioned swelling and diffuse crepitation over the anterior chest

from the nipple level to the ear lobes on the neck was demonstrable. No difficulty in swallowing or respiration was visible nor acknowledged. X-Ray of the chest revealed considerable soft tissue emphysema in the sub-maxillary and cervical regions. Inasmuch as the temperature never rose above 101°, no antibiotics were administered. The emphysema gradually disappeared, the patient being discharged two days after surgery.

The literature contains scattered reports of subcutaneous emphysema complicating tonsillectomies 1-13 (Table I). As a result of the investigations of the Macklins, 14-16 Hamman, 17, 18, Joannides and Tsoulos, 19, Kelman and others 20-21, much information has been gathered as to the mechanism of production of this complication. The condition may develop in any situation associated with a sudden over-distention of the lungs, and the following train of events is believed to occur. The primary source of the escaped air is a ruptured pulmonary alveolus or alveoli, resulting from excessive rise in intrapulmonary pressure. Consequently air finds its way into the connective tissue septa of the lung, producing an interstitial pulmonary emphysema. The entrapped air may travel along the septa to the periphery of the lung to form subpleural emphysematous blebs which may subsequently rupture and cause a pneumothorax, or it may dissect its way to the hilus of the lung and thence into the mediastinum to pro-

EDMOND J. McGREEVY, M.D., F.A.C.S.

JOHN V. McGREEVY, M.D., F.A.C.S.

TABLE I: SUMMARY OF REPORTED PATIENTS WITH SUBCUTANEOUS EMPHYSEMA FOLLOWING TONSILLECTOMY

Author	Age	Sex	Anesthesia	Onset	Duration
Parish, 1 1910	28	M	Ether	10 Min. P.O.	3 Days
Richardson, 2 1912	Adult	M	Not Stated	1 Hr. P.O.	48 Hours
Rosenheim, 3 1922	21	M	Ether	12 Hours	10 Days
Richards, 4 1923	12	F	Ether	Same Day	2 Days
	10	M	Ether	Same Day	Not Stated
Stein, 5 1923	7	M	Ether	Immed. P.O.	7 Days
Von Hofe, 6 1930	2	M	Ether	Immed. P.O.	5 Days
	4	F	Ether	Immed. P.O.	3 Days
	2½	M	Ether	Immed. P.O.	4 Days
Keen, 7 1932	5	M	Chloro. ether	30 Hrs. P.O.	11 Days
Stevensen, 8 1933	25	M	General	6 Hrs. P.O.	5 Days
MACREADY, 9 1935	65	M	Local	1 Hr. P.O.	48 Hours
Baker, 10 1936			Gas Ind. to		
	27	F	Intratr. ether	12 Hours	6 Days
Silverman, Talbot, 11					
McClellan	8	M	Ether	10 Hours	6 Days
Knudson, Quелlette 12	6	M	Ether	15 Min.	7 Days
Ferguson, McGarrey, 13					
Beckman, Broder	4	F	General	1 Hour	6 Days
McGreevy, McGreevy	16	M	General	2 Hours	2 Days

duce mediastinal emphysema. Air trapped in the mediastinum may remain there and be resorbed gradually, or, with sufficient and continued pressure may be released through several pathways¹ through the thin parietal mediastinal pleura to produce pneumothorax² through the fascial planes of the neck into the subcutaneous tissues of the head, neck, chest, abdomen, back and upper extremities,³ through the diaphragmatic openings of the aorta and esophagus to the retro-peritoneal tissues and peritoneal cavity, even dissecting its way outward at times through the inguinal ring to the scrotum, perirectal tissues and thighs.

A necessary precursor then of subcutaneous emphysema complicating tonsillectomy is mediastinal emphysema. Mediastinal emphysema, in turn, as the Macklins have shown, rarely occurs without a preceeding pulmonary interstitial emphysema.

Although mediastinal emphysema in most instances subsides spontaneously with bed rest, at times mediastinal pressure may become so great as to require emergency measures as a life saving procedure. The development of cyanosis, dyspnea, weak pulse and a serious decline in blood pressure may neces-

sitate immediate incision of the suprasternal notch to facilitate removal of air and release of pressure. Relief of extensive subcutaneous emphysema has been obtained by means of superficial incisions of the skin of the chest wall and aspiration of air with an ordinary syringe and needle.

SUMMARY

- (1) Subcutaneous emphysema, complicating a routine tonsillectomy, is reported.
- (2) The mechanism of emphysema is discussed.
- (3) Treatment in most instances is symptomatic with good results.

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(Continued on Page 179)



THE DOCTOR'S DUTY IN LAW ENFORCEMENT

Honorable James R. Bandy,
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Armour, South Dakota

Two things have been assigned to me, 45 minutes of your time and the topic. "The Doctor's Duty in Law Enforcement." It would seem that I cannot use both of them. I find that Webster defines the term "enforcement" as meaning "to put in force, to execute with vigor." I also find that the physician actually has little if any more duties in law enforcement than are the lot of any other good citizen. Oh, of course, there are a few, such as reporting births, deaths, ophthalmia neonatorum, and venereal diseases, but there is no way in which I could inflict myself upon you for the allotted length of time with such a limited amount of leeway. Accordingly, as is done daily by the bureaucrats, I expand the area for consideration. I do this by the rather simple expedient of leaving out a couple of limiting words and come up with a nice new topic, something like this: "The Place of the Doctor in Law." I think that this could be limited to "The Place of the Doctor in Litigation" because it is highly probable that he has no special place, other than that if an actual party, of course, in any other portion of the all inclusive field of law.

The Doctor comes into litigation as a witness either actual or prospective. There are four main ways in which he gets into the witness chair: (1) He may have been a bystander at or participant in some action or

transaction that has become a source of controversy. We are not today concerned with this aspect because he then comes before the court in his lay capacity as a citizen; (2) He may have been the attending physician or surgeon; (3) He may have made an examination to acquaint himself with the facts to thereafter qualify himself as a witness; (4) He may be in court for the sole purpose of answering a hypothetical question without ever having seen the person as to whom the question relates. In the last three instances he appears as a scientific witness and expert, and as such is received and treated precisely as any other expert. Many definitions have been given of the term "expert" but this one will probably suffice:

"Persons who are professionally acquainted with some science or are skilled in some art or trade, or who have experience or knowledge in relation to matters which are not generally known to the people." (Black)

Perhaps to more clearly outline the field of expert witnesses it is desirable to briefly state some of the qualifications which the law deems essential to qualify any person appearing upon the stand as a witness. It is assumed that an adult has the mental capacity to recognize and relate ordinary matters he has seen, heard, or in some other manner experienced. He declares a willingness and intention to be truthful and then must show that he has some knowledge as to one or more

*Presented at the Medicolegal conference, June 27th, Huron, S. D.

facts which are relevant to the question or questions in issue. In this sense knowledge is used as a relative term, of course, for if a witness had absolute knowledge and it were so conceded there would never be need for more than one witness to any particular fact. This we know is not true. So, it is better to qualify the statement as first made and say that the person must think he has knowledge, or perhaps we may be slightly cynical and say that he claims to have knowledge. To establish this qualification he must first testify as to facts sufficient to establish an opportunity to have acquired knowledge as to the matters he intends to relate. In other words, he must establish a knowledge based upon the exercise of one or more of his senses and not upon the statement or reports of others. The latter type of information being known as hearsay in the field of law.

The expert witness comes within a somewhat different classification. The law recognizes that there are many fields in which the ordinary inexperienced or untrained person is not qualified to recognize and evaluate those things which he does see, feel or otherwise experience. It therefore requires that in these fields in which the ordinary layman is not qualified either by occupational experience or systematic training, or both, to acquire accurate knowledge, there be first established such experience or training as will give reasonable ground for supposing the possession of such experiential capacity by the witness. When this has been shown, the witness is then considered an expert in the field involved.

The witness testifying as to facts acquired through the exercise of one or more of his senses places those facts before the jury or the trial judge, if it be a case tried without a jury, and in the usual case it is then the province of the trier of the facts to draw from such testimony inferences and conclusions as to the ultimate facts. However, there are numerous instances in which the jury or trial judge lack this thing I have called experiential capacity to draw correct or accurate inferences or conclusions from facts as related by an expert witness and in such situations another rule, known as the opinion rule, comes into play. This rule permits an expert to express his opinions and conclusions upon the facts as established by the evidence and

in so doing, in practical effect, he thereupon takes the place of the jury or trial judge. The extent to which such opinions and conclusions are binding of course varies with the degree of experience or training necessary to the formation thereof. As examples, one would say that the opinion of a car body repairman as to the damage sustained by an automobile might be rather lightly held by a jury whereas it is the law of this state that malpractice (I know that is a "bad word" I should not say on Sunday) cannot be established other than by the testimony of experts, our Court having said:

"Because the central issues of this case, viz; (a) negligence, and (b) its causal connection with the injury suffered by the plaintiff, turn upon scientific questions laymen are not qualified by learning or experience to answer, plaintiff was required to establish those elements by the testimony of experts." *Lohr v. Watson*, (S. D. 1942) 2 N. W. 2d 6.

To the end that the jury or trial judge may be able to properly utilize these expressions of opinion it is oftentimes vitally necessary that the facts upon which the witness bases such opinions be fully placed before them or him. I believe that this may be well illustrated by the following excerpts from an instruction often given in connection with the testimony of experts when hypothetical questions have been asked and answered.

"Testimony given by the experts who testified in this case, including their opinions, is proper for your consideration, subject to the same rules of credit or discredit as apply to any other witness, but such testimony is not conclusive upon you in this case. Whether the matters testified to by any witness as facts are true or false is to be determined by the jury alone. "In examining an expert witness attorneys may ask him or her what is known as a hypothetical question. By such question the expert is asked to assume the truth of certain facts stated in such question and to base his answer upon such assumption. His opinion neither establishes nor tends to establish the truth of such assumed facts upon which it is based. It is for the jury to determine from all of the evidence, facts and circumstances whether or not the facts assumed in any hypothetical question have

been proved, and if you do not believe that any fact so assumed in any hypothetical question has been proved you will then determine the effect of such failure of proof upon the value and weight of such expert opinion based upon the assumption of the truth of such fact."

From this it is to be seen that the jury or trial judge is not assuming to pass upon the correctness of the conclusions of an expert witness but rather upon whether the facts assumed have been established in the manner in which the law requires.

We, therefore, find the physician or surgeon approaching the witness stand to testify as to those facts peculiarly within his knowledge and to draw therefrom those conclusions which his scientific knowledge teaches him to be correct. At this point it may be proper to digress momentarily and say that while it is not permissible, generally speaking, to testify as to matters not based upon some involvement of the human senses of the witness, the data of every science are numerous in scope and variety. No one professional man can know from personal observation more than a minute fraction of the data which he must every day treat as working truths. Hence, a reliance on the reported data of fellow scientists learned by perusing their reports in books and journals. The law must and does accept this kind of knowledge from scientific men.

THE "OATH"

He is about to be called upon to divulge matters which he has learned in the course of his professional relationship with some party to the action, and, undoubtedly, there comes to his mind that portion of the Hippocratic Oath; "Whatever I see or hear, professionally or privately, which ought not to be divulged, I will keep secret and tell no one."

Literal application of the language of this portion of "The Oath" would seem to place upon the physician himself the duty of determining the meaning and application of the words "which ought not to be divulged" and to the end that we may clearly understand the situation as it actually exists it is perhaps well to discuss and consider this phase at once.

On the general duty to testify one may find early precedent in judicial history. As early as 1612 Sir Francis Bacon said, in the Countess of Shrewsbury's Trial, "You must know

that all subjects, without distinction of degrees, owe to the king tribute and service, not only of their deed and hand, but of their knowledge and discovery. If there be anything that imports the king's service, they ought themselves undemanded to impart it; much more, if they be called and examined, whether it be of their own fact or of another's, they ought to make direct answer." 2190 Wig.

A very learned authority has more recently written:

"From the point of view of society's right to our testimony, it is to be remembered that the demand comes, not from any one person or set of persons, but from the community as a whole, — from justice as an institution, and from law and order as indispensable elements of civilized life. The dramatic features of the daily court-room tend to obscure this; the matter seems to be between neighbor Doe and neighbor Roe; we are prone to shape our own course by the merits of the one or the other of their causes. But the right merely happens to be exemplified in the case of Doe v. Roe; that is all. The whole life of the community, the regularity and continuity of its relations, depend upon the coming of the witness. Whether the achievements of the past shall be preserved, the energy of the present kept alive, and the ambitions of the future be realized, depends upon whether the daily business or regulating rights and redressing wrongs shall continue without a moment's abatement, or shall suffer a fatal cessation. The business of the particular cause is petty and personal; but the results that hang upon it are universal. All society, potentially, is involved in each individual case; because the process itself is one of vitality. Each verdict upon each cause, and each witness to that verdict, is a pulse of air in the breathing organs of the community. The vital process of justice must continue unceasingly; a single cessation typifies the prostration of society; a series would involve its dissolution. The pettiness and personality of the individual trial disappear when we reflect that our duty to bear testimony runs not to the parties in that present cause, but to the community at large and forever." (2192 Wig.)

This general duty has been implemented

by very specific provisions and a form of process known as a Subpoena by which a witness is compelled to attend and, under certain circumstances to bring specified records, papers and documents with him. With reference to this it is further provided, "Disobedience of a subpoena, or refusal to be sworn, or to answer as a witness, *** when lawfully ordered, may be punished as a contempt of the court *** ." (SDC 36.0304) This particular provision is supplemented by another which provides, "The witness shall also be liable to the party injured for any damages occasioned by his failure to attend, or his refusal to be sworn, testify, or give his deposition." (SDC 36.0306)

But I am digressing. The precise point was the interpretation to be placed upon the language of the Hippocratic Oath in the light of the legal obligation of witnesses to testify.

One of the earliest recorded instances of this seeming conflict appears in connection with the Duchess of Kingston's Trial in 1776. A physician on the witness stand was asked as to his knowledge of a marriage between the accused and her alleged husband and he replied, "I do not know how far anything that has come to me in a confidential trust in my profession should be disclosed, consistent with my professional honor." He was at that time told " *** a surgeon has no privilege where it is a material question in a civil or criminal cause to know whether parties were married or whether a child was born, to say that this introduction to the parties was in the course of his profession and in that way he came to the knowledge of it *** . If a surgeon was voluntarily to reveal these secrets, to be sure, he would be guilty of a breach of honor and of great indiscretion; but to give that information in a court of justice, which by the law of the land he is bound to do, will never be imputed to him as any indiscretion whatever." (Wig. 2380)

Accordingly, we may commence with the major premise that it is not within the province of the physician or surgeon to determine, from his own conclusion, as to what matters he will or will not divulge when called as a witness. That is a power reserved to the state and in this state it has been thus expressed:

"A physician or surgeon, or other regular practitioner of the healing art, cannot, without the consent of the patient, be ex-

amined in a civil action as to any information acquired in attending the patient which was necessary to enable him to properly act for the patient." SDC 36.0101 (3)

At the outset it is to be observed that this so-called privilege, relates only to civil actions and has no existence in connection with any criminal action or proceeding.

Further examination of the statute also discloses that it is specifically provided by SDC 36.0102:

"The objection that the communication is privileged must be made by or in behalf of the person making the communication."

It would seem to follow that the so-called privilege is of no concern to the professional witness unless such privilege is claimed, by the patient. However, SDC 36.0103 appears to indicate a somewhat different approach to the problem in that it provides:

"It shall be the duty of the court, of its own motion and without waiting for objection to advise a witness at the appropriate time of his **right to refuse** to answer any question requiring the disclosure of any privileged communication."

Insofar as I am aware this seeming conflict has not been resolved by any decision of our Supreme Court. However, it would be my observation that the professional witness would be well advised to follow the interpretation of the trial judge rather than to assume to interpret and apply the statute himself with what might be uncomfortable personal consequences. At this juncture it is probably appropriate to say that, while he may at times so appear, the trial judge has not been completely relegated to the functions of an umpire, and a witness may at any time, even without an objection having been made, appeal to the trial judge for his ruling upon the propriety of answering a question propounded. Thus the question as to the necessity of answering a question which seems to the physician or surgeon to be an invasion of the privilege granted by statute to the professional relation may be passed on to the trial judge and will become his responsibility.

Now this privilege of the patient may be waived in express language as is frequently done in insurance applications or through simple agreement between the parties to an action. Clearly any and all claim of privilege

is waived when a physician is called and examined by the attorney for the patient. Opposing counsel may then, on cross-examination interrogate him fully. But it is not necessary that the physician be called. Consent is to be implied, according to our statute;

"If a person offer himself as a witness he thereby waives any privilege he might otherwise claim, which would prevent the examination of his attorney, spiritual adviser, or healing practitioner on the same subject within the meaning of subdivisions (2), (3) and (4), of Section 36.0101. *** "

(SDC 36.0102)

SDC 36.0602 provides for a compulsory "physical or mental examination or blood test by a physician" upon order of the Court. SDC 36.0603 provides that the one examined may demand a copy of a detailed written report of the findings and conclusions of the examining physician but as a consequence of such demand, provides; "After such request and delivery the party causing the examination to be made shall be entitled upon request to receive from the party examined a like report of any examination, previously or thereafter made, of the mental or physical condition."

By SDC 36.0604 it is further provided:

"By requesting and obtaining a report of the examination so ordered or by taking the deposition of the examiner, the party examined waives any privilege he may have in that action or any other involving the same controversy, regarding the testimony of every other person who has examined or may thereafter examine him in respect of the same mental or physical condition."

Thus it appears that it is not the policy of the law to permit concealment of medical findings in any action in which an issue arises as to the physical, or mental, condition of a party to that action.

Perhaps at this point, having dealt with the question of the privilege of the patient we may properly consider the question as to the obligation of the Doctor to testify in his professional capacity, as contrasted with his lay character as a citizen. May he be coerced to testify as a professional witness and, if so, upon what terms?

It should be kept in mind that, at the outset, we indicated that three ways in which a

Doctor comes to the witness stand would be considered, viz; as the attending physician or surgeon; as one who has made an examination of the patient to qualify himself as a witness; and as one who comes into Court solely to answer a hypothetical question without having ever examined the patient. I think that we may safely say that the question of compulsory attendance has no relation to the last two classes. Clearly the physician or surgeon is not compellable to make the qualifying examination of the patient. If, however, he does do so he then has knowledge of facts and that is a different matter. It would seem to be equally clear that he would not be subject to subpoena for the sole purpose of answering a hypothetical question. Therefore we shall deal with the Doctor who is or was the attending physician or surgeon and include with him the Doctor who has actually made an examination to qualify himself as a witness.

A situation arose in California in which a physician specializing in nervous and mental diseases examined a man, he did not advise or treat the man but made the examinations solely for the purpose of advising the man's attorneys in their preparation of the man's lawsuit. Thereafter the other party sought to take the physician's deposition and he declined to answer any questions for two reasons.... (1) that the information was privileged, and (2) that he was not required to divulge this information on the ground that "the use of the faculties of a physician, neurologist, and psychiatrist and for an opinion based thereon, which opinion is a portion of my property which I do not wish to be deprived of without due compensation and arrangement having been made in relation thereto." The Supreme Court of California in passing upon this last contention wrote:

"Doctor Catton asserted a privilege personal to himself, a privilege not to testify to knowledge and opinions that were the result "of his special learning without payment of more than the ordinary witness fee. Petitioner asks him to testify not by reason of his expertness in a special field but because of his knowledge of specific facts as to Hession's condition, facts pertinent to an issue to be tried. He is like any other witness with knowledge of such facts; it is immaterial that he discovered them by

reason of his special training. In testifying as a witness he would simply be imparting information relevant to the issue, as he would had he been a witness to the accident in which Hession was injured. 'A physician who has acquired knowledge of a patient or of specific facts in connection with a patient may be called to testify to those facts without any compensation other than the ordinary witness receives for attendance upon court.' "

San Francisco v. Superior Court, (Cal. 1951) 231 Pac 2d 26, 25 ALR 2d 1418.

In this connection it may be of some interest to report that, notwithstanding the above ruling the physician was not compelled to testify, the final determination being that the information was privileged as being within the ambit of the attorney-client relation (as somewhat expanded by the California statute on the subject) and that the physician was acting merely as the injured man's agent in obtaining and conveying information to his attorneys.

COMPENSATION

It is said that the weight of authority inclines to the view that an expert witness is not entitled to demand extra compensation before testifying to facts within his knowledge, although it may have required professional study, learning or skill to ascertain them. (Anno. 2 ALR 1576)

The rule has been thus rationalized in an opinion of the Supreme Court of Kansas:

"There are experts of many kinds, professional as well as lay. Many men are experts in certain lines of endeavor. If doctors, dentists, lawyers, and engineers may refuse to testify concerning matters on which they may have opinions due to their respective trainings, simply because special fees have not been paid them, then one qualifying as an expert shoe repairer may not be compelled to state what was the matter with shoes he repaired because what he did was done in an expert capacity and his expert witness fees have not been paid. It can readily be seen that such a situation would be intolerable. It would tend to permit those who could afford it to produce witnesses who testimony might be said to be expert, and would prevent those without requisite means of the benefit of such testimony. We are not referring to that class of cases where special prepara-

tion is required as a condition precedent, but to those where the witness is interrogated as to facts and opinions which he knows and has without such special preparation. In the absence of a statute authorizing the trial court to fix expert witness fees, or permitting the witness to refuse to testify until a stipulated fee has been paid, we are not disposed to hold that a witness claiming to be an expert called upon to give expert testimony may refuse to testify unless his demands have been met. *** "

Swope v. State, (Kan. 1937) 67 Pac. 2nd 416.

However, as a practical matter it may be said that while any witness is expected and may be compelled to give testimony as to facts within his knowledge, it will be an extremely rare occurrence for an expert to be interrogated as to his opinions and conclusions without prior arrangements having been made with him as to his compensation. Rightly or wrongly, and without intending any odious imputations, a trial lawyer is desirous of the most affable climate before asking opinions of any expert witness.

In this connection it may be said that South Dakota law provides for the appointment of experts by the Court, provides that the court may fix the amount of their compensation but leaves the question of compensation for non-court appointed experts to the agreement of the interested parties. The most that can be said of our statute, in its application to the usual lawsuit, is that it recognizes the propriety of extra compensation for one who is called as an expert witness.

Lastly, in consideration in this paper but, of course, not in its importance, we come to the actual testimony to be given by the Doctor, and there looms the shibboleth of the rules of evidence.

It has been written that the two great aims of the system of evidence are:

- (a) None but facts having rational probative value are admitted, and
- (b) All facts having rational probative value are admissible, unless some specific rule forbids.

Ordinarily those cases in which a physician appears as an expert witness are tried before a jury and we are, all of us, sometimes rather annoyed by an excess of objections and constant squabbling and bickering as to the admissibility of the proffered evidence. The

justification of these rules of evidence (not, of course their misuse) was expounded by a very learned judge in the following language:

"*** But it is the entrusting of the fact-finding function to jurors, honest and zealous but sometimes lacking the judge's special training, which necessitates the strict application of evidentiary rules.

"It is easy enough to answer that the jurors in their own affairs, like all mankind, rely on hearsay, pure opinion, even on guesses, intuition and hunches. That's the way the world runs, and why should the fusty old courts treat jurors like children who cannot be allowed to listen to the facts of life, or like incompetents whose thinking must be done for them by the judges? But because a citizen orders his own affairs on curbstone advice or casually passes along gossip as a fact, it does not follow that, as a juror, he can apply such methods to solemn arbitraments as to his neighbor's property or liberty. A juror, as soon as sworn, becomes a party of the judicial institution and function. His prepossessions and prejudices he must park outside, with his car. Inside the courtroom he is no longer licensed to make snap judgments or to apply his workaday superstitions. He must come to his judgments by thinking, and there is no time to teach him how to think, how to reach right conclusions from appropriate premises, how to discard and ignore, or how to shut his ears to the irrelevant, the distracting and confusing. The centuries-old judicial institution, in which he takes temporary office, substitutes, for the course in logic for which there is no time "available, time-tested methods of keeping from his ears that which cannot, in logic and justice, be useful to the decisional process. "If a juror has a trained and efficient mind, he is not the loser by this exclusion. The laws of evidence do for him what he would inevitably do for himself if he had to. On the other hand, if a juror's training and his customs have not habituated him to right methods of arriving at conclusions, he has no cause for complaint when the law, out of its ancient wisdom, sees to it that he is furnished right materials only."

Judge Charles S. Desmond, N. Y. Court of Appeals, Article in Vol. 41 ABA Journal, page 209. March, 1955.

Now, the type of evidence, known as hearsay has been defined by our own Supreme Court in the following language:

"Evidence is called hearsay when its probative force depends, in whole or in part, on the competency and credibility of some person other than the witness by whom it is sought to produce it."

Johnson v. C. & N. W. R. Co., (S. D. 1949) 38 N. W. 2nd 348.

Such evidence involves an attempt to restate something that has been told the witness by some other person, as proof of the truth of such statement. The rule does not, of course, apply in cases in which the only question at issue is as to whether the person did or did not make the statement. May I illustrate the distinction in this manner- Supposing the physician is called in connection with a prosecution for an assault with a dangerous weapon upon one who becomes his patient. He would not be permitted to testify that the patient told him that the defendant, John Doe, stabbed him with a knife, because he could not personally vouch for the truth of all the facts contained in the statement. It would be hearsay. However, suppose the patient had accused John Doe of stabbing him, that John Doe denied such act and was bringing a civil action to recover damages for the slanderous imputation. In this situation it would be entirely proper (evidentially) for the physician to testify as to the same statement on the part of his patient because the truth or falsity of the statement would not necessarily then be in issue and the evidence would be offered to establish the fact of the accusation, rather than the truth thereof.

In some measure related to this rule is the one which prohibits the admission of self-serving declarations of a party, and its corollary which freely admits declarations of a party when against his own interest. These rules, like most of the other rules of evidence, are based upon human experience which indicates that we are all prone to think of reasons and excuses to justify our action or inaction but are equally loath to admit our own derelictions.

I have dwelt at some length upon these rules because they have a rather direct bearing upon the testimony which the physician is going to be permitted to give.

When he sees a patient he deals in sym-

ptoms both objective and subjective and to the end that you may understand my personal use of these terms, I define my understanding and use of them to be:

Objective: Perceptible to others than the patient, subject to measurement or demonstration.

Subjective: Any and all others.

It will immediately occur to you physicians that you must, of necessity, accept certain subjective symptoms in making your diagnosis and prognosis of the case and that, under the definitions I have given these may be classified as self-serving declarations of the patient. This is true. However, again the law recognizes the overriding impact of self interest and upon the assumption that the patient will be truthful in his desire to obtain the best possible diagnosis and treatment permits the utilization by the physician and the introduction in evidence by him of any and all subjective symptoms related to him by the patient, which were necessary to sound diagnosis and treatment. This rule however has no application to one other than a physician or surgeon who administers or intends to administer treatment of some sort. In other words, when a physician or surgeon makes an examination solely to qualify himself as a witness, we again have this principle of self-interest appearing, but this time in reverse. The law now considers that the patient seeks only a favorable statement and opinion from the expert. Needless to say, statements by the patient as to the claimed circumstances of his injury, who was at fault, etc., are not necessary to diagnosis and treatment and therefore are, quite properly, subject to objection.

Another exception to the rule relating to hearsay evidence is the one which permits the introduction of what is known as a dying declaration in cases of homicide. Again we deal with a rule of necessity, as to which our Court has said :

"Dying declarations are admitted from the necessity of the case, to identify the prisoner and the deceased, to establish the circumstances of the *res gestae*, and to show the transaction from which the death resulted."

State v. Clark, (S. D. 1923) 194 N. W. 655.

Since such declarations are inadmissible until it has first been established that at the

time of their making the declarant was conscious that he or she was then in extremis, the physician's function may be two fold. If such a declaration was made in his presence, and it is most likely that it would be, he must be prepared not only to relate such declaration but also to state the facts relied upon to establish that the declarant was at the time conscious of the fact that he or she was in extremis. This consciousness may be established not only by the express statements of the decedent but may also be inferred from the conduct, condition or other statements of the decedent.

It is reasonably apparent that no busy doctor is going to be able to retain all of these matters in his memory without some written aids and it therefore seems entirely appropriate to make mention of the matter of records.

A witness may always, within the limits of the other rules of evidence, testify as to matters which he then recollects and this rule is not changed by the fact that he may have refreshed his recollection immediately before going on the witness stand or while on the stand, nor is it particularly important how he has thus refreshed his recollection if he is prepared to swear that at the time of testifying he is doing so from his own recollection, refreshed or otherwise. Thus it appears that adequate records are desirable for the purpose of memory refreshment.

However, perhaps recourse to the records does not result in such refreshment as to attain a present independent recollection. The records are still useful because the doctor may testify from them if he is prepared to swear that they were made by him or under his supervision at or about the time of the occurrence and that he knows that they accurately state the facts. I therefore commend the keeping of the most detailed records reasonably feasible.

There is yet another way in which records may be admissible in evidence. In recognition of the generally acknowledged fact that business records are, in fact, accurately kept in most instances, that such records are usually accepted as authentic in everyday life, and that it would be well nigh impossible, in many instances, to call before the court all of the individuals who were instrumental in making and keeping such records, there has

been adopted, as a Supreme Court Rule in this State, the following:

"The term 'business' shall include every kind of business, profession, occupation, calling, or operation of institutions, whether carried on for profit or not.

"A record of an act, condition, or event, shall in so far as relevant, be competent evidence if the custodian or other qualified witness testifies to its identity and the mode of its preparation, and if it was made in the regular course of business, at or near the time of the act, condition, or event, and if, in the opinion of the court, the sources of information, method, and time of preparation were such as to justify its admission.

"This section may be cited as the Uniform Business Records as Evidence Act."

(SDC 36.1001) (Cf. Gile v. Hudnutt, (Mich. 1937) 272 N. W. 706; State v. Evert, (S. D. 1928) 219 N. W. 817).

It is apparent that Hospital Records may become admissible as to an "act, condition or event" properly included therein upon establishing the authenticity and probable accuracy of such record.

I therefore commend the keeping of the most detailed records reasonably feasible.

May I close with the observation that I am appreciative of the attention given to this dissertation which, while somewhat lengthy, does not pretend to be inclusive of all possible subjects nor exhaustive of those included. Rather, it has been prepared in the thought that it might assist the physician and surgeon in his contacts with the courts and thus be of mutual aid to both of our professions.

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The History of the South Dakota State Medical Association

(Continued from April)

Clark J. Pahlas

Pierre, South Dakota

The field of venereal disease also came under the watchful eye of the State Medical Association. Surgeon General Parran of the United States Public Health Service requested in the fall of 1936 that a state committee on the control of syphilis be formed by the South Dakota State Medical Association. This committee was established, and a report made to the Surgeon General recommending a preventive program for the State of South Dakota. It was the opinion of this committee that due to the pronounced rural character of the population of South Dakota it would not be practical to establish special venereal disease clinics. The committee also felt that the treatment of venereal disease in the state was being satisfactorily carried on through the State Board of Health.³¹ It was thought, however, that "dark field diagnosis" should be made more readily available and that funds should be created to compensate partially the doctor for treatment of indigent syphilitics. As for the future, the committee felt that any venereal disease program for South Dakota "... should be largely educational on two fronts, (a) to the physicians, stressing the points of diagnosis and treatment; (b) education of the public through newspaper articles, radio talks, and public speakers."³²

Tuberculosis control was another prime interest of the State Medical Association. Its program in this matter was keyed to public

education and efficient management of the state sanatorium at Sanator. In 1936 the South Dakota State Medical Association became alarmed at the conditions existing at Sanator. It was felt that the sanatorium's administration was deviating from the original purpose for which the institution was founded, that of carrying only curable cases of tuberculosis. The State Medical Association was certain that advanced tubercular patients at Sanator (representing 90% of its patients in 1936) deprived hopeful cases of treatment. Therefore, the association favored and recommended a rededication of the purposes for which Sanator was founded.³³ The desire for rededication was realized. The State Medical Association's Public Health Committee in 1937 reported the passage of a law giving the sanatorium the right to discharge patients not being benefited by treatment after six months of residency.³⁴

A constant campaign of education, prevention, and control with regard to tuberculosis was carried on by the association. Its members since 1946 have co-operated with the State Board of Health in bringing to the people of the state the mobile x-ray units.³⁵ The association's primary concern in the mobile x-ray program has been the revealing of an unexpected number of tuberculosis carriers in the state. The association has attempted to remedy this by endorsing state legislation that would "permit compulsory isolation for the patients with active tuberculosis." The association's Subcommittee on Tuberculosis in 1955 reported that the legislature "did not see fit to permit" such isolation.

31. In 1940 South Dakota followed the lead of the United States Public Health Service by adopting the "chemical quarantine plan" of syphilis control. Under this plan doctors are paid for each weekly report indicating that a treatment has been given to a patient with infectious syphilis. In 1940 because of this plan syphilis reporting almost tripled over previous years. See the *Journal Lancet*, LXI (July, 1941), 260.

32. *Journal Lancet*, LVII (September, 1937), 391.

33. *Journal Lancet*, LXI (July, 1936), 351.

34. *Journal Lancet*, LVII (September, 1937), 391.

35. *Journal Lancet*, LXV (September, 1945), 335. From June, 1946, to October, 1948, the units had taken a total of 100,000 plates.

tion. A need for public education has been realized; and, accordingly, the association's work has been directed along these lines through public addresses, radio broadcasts, and newspaper and magazine articles.³⁶

The State of South Dakota as late as 1944 was without a program of mental health. The State Medical Association realized that the war would return men to its communities in need of readjustment. It therefore created in 1944 a Committee on Mental Hygiene. This committee, representing the association, has not carried on a mental health program, but has worked with and supported the State Mental Health Association in its program of mental health education.³⁷ However, the association's Subcommittee on Mental Health was inactive during the year 1954-55, and little if anything was accomplished previous to that time. This lack of tangible evidence of accomplishment indicates that the State Medical Association has contributed little toward the advancement of Mental health in the state.³⁸

HOSPITAL FACILITIES

Not only did the association demonstrate a continuing interest in improving medical care, but it also sought to improve hospital facilities of the state. The association favored a hospital improvement program which included inspection and licensing of hospitals according to a prescribed standard, as determined by the State Board of Health.³⁹ However, one of the grave weaknesses in the hospital setup in South Dakota was that the State Board of Health had no jurisdiction over any hospital except maternity homes. This weakness was brought to the attention of Governor Sharpe in 1943 by Dr. Cottam, Superintendent of the State Board of Health. Both Superintendent Cottam and Governor Sharpe felt this "should be remedied in the next session of the state legislature."⁴⁰

It was as a result of such sentiments as those of Dr. Cottam and Governor Sharpe that Senate Bill 62 was submitted and passed in 1945. This provided that the State Board of Health should "... license hospitals and

have control thereof so far as sanitary and other like measures are concerned."⁴¹ Overwhelming approval was given by the State Medical Association, as well as the State Osteopathic Association. The Chiropractor's Association, however, felt this bill would legislate them out of the hospitals. Chiropractors were looked upon as cultists. They feared that this would prejudice the Board of Health against them. The chiropractors, organizing themselves in opposition, managed to petition the measure satisfactorily. However, brought to a referendum, the measure was approved by the people of the state, and Senate Bill 62 became a law.

MEDICAL EDUCATION

The State Medical Association's interest in the control of disease and in improving medical services, however, was overshadowed by its interest in higher education. Composed as it was of professional men, the association realized the value of knowledge and recognized association responsibilities to contribute to the advancement of education.

Although one of its early contributions to education did not deal specifically with medical education, it is worth mentioning. This early support of education was the creation, in 1928, of the Dr. Frederick Angier Spafford Memorial Prize. This prize, sponsored by the State Medical Association, consisted of a \$25.00 grant to a University of South Dakota student showing proficiency in Latin, preferably Virgil. The award was established in honor of Dr. Frederick Angier Spafford in recognition of his many years of service as a member of the State Board of Regents of Education and especially for his interest in the study of the ancient classics.⁴²

Although the association maintained the Spafford Memorial Prize, its main contributions and interests were naturally directed toward medical education and the University Medical School at Vermillion. This interest led the association, in 1930, to investigate the needs of the medical school so as

36. *South Dakota Journal of Medicine and Pharmacy*, VIII (August, 1955), 294.

37. *Journal Lancet*, LXLV (September, 1944), 299.

38. *South Dakota Journal of Medicine and Pharmacy*, VIII (August, 1955), 294.

39. *Journal Lancet*, XLVI (September 1, 1926), 400.

40. *Journal Lancet*, LXIV (September, 1944), 296.

41. *Journal Lancet*, LXV (September, 1945), 334. See *Session Laws of South Dakota* (1945), Chap. 108, pp. 112-14.

42. *Journal Lancet*, LIX (July, 1939), 296. For further details of the Spafford fund see *Journal Lancet*, XLIX (September 15, 1929), 439, and XLVIII (October 1, 1928), 438-39. See also Appendix G of this thesis for listing of students awarded the prize.

better to "... enable the University to meet the requirements of various class A medical schools of the United States." In this investigation of the two-year basic medical science school the association was particularly impressed with "the absolute economy of the school." In discussing the findings, one member of the association's Investigating Committee made the following comment:

The faculty of the school at Vermillion are certainly working overtime to keep their school right up to the standard. They need more help, additional lectures, another professor or two probably. That is a very modest request. The request they are making this year I think we should put up to the legislators from our districts and tell them that perhaps no other department in the state of South Dakota needs a little more appropriation as much as the Medical Department. Our other schools are duplicated over the state, the medical school is not. It is a small school but it meets the needs of South Dakota.⁴³

Although the medical school did meet the needs of South Dakota, it was a two-year school and thereby in danger of losing accreditation received from the American Medical Association. At its annual meeting in 1937 the American Medical Association had made a decision to discontinue accrediting most two-year basic medical science schools. It was felt that "... the problem of transferring from a basic medical science to a clinical school for completion of a medical education, presents increasing difficulties and is a matter of serious concern to prospective medical students."⁴⁴ Dr. J. R. Westaby, the South Dakota State Medical Association's delegate to this 1937 meeting, had this to report concerning South Dakota's own two-year school.

Our own medical school was on the block and it was doubtful if any of the two-year schools could survive the treatment the board was administering. Only a few two-year schools survived the knife and had it not been for the efficient work of our own President, Dr. E. A. Pittenger, who was sent single-handed to meet the board and who fought for every qualification of our course

at Vermillion, it would have been dropped from the accredited list.⁴⁵

Although the two-year school was saved at that time, it has never held the academic prestige of a full four-year school. In 1946 a proposal was made to create such a four-year school. However, legislation at Pierre failed, and the dream of the four-year school was forced to await the future.⁴⁶

The Council of the South Dakota State Medical Association has been very dubious concerning the possibility of establishing a first-rate class A medical school in South Dakota. The council had gone on record as being opposed to the establishment of any school except one that would qualify as class A.⁴⁷

It was the general feeling of the council that the two-year school should be improved first to regain an A rating and then an attempt should be made to establish a four-year school. In 1948 the State Medical Association surveyed the needs of the medical school, with the idea of bringing the course of study up to this desired rating. It was discovered that the physical plant at Vermillion was far below standard and that financial assistance was needed. With this in mind the association's Committee on Medical School Affairs in 1949 "... resolved that a non-profit endowment corporation be set up on behalf of medical education in the state of South Dakota; that a board of trustees be selected by the Council of the South Dakota Medical Association, and the Dean of the Medical School."⁴⁸ Members of the State Medical Association, desiring to advance the conditions of the medical school, contributed to the endowment fund. One of these early contributions came in 1950 in the form of a "... gift of an income property nearly surrounded by the medical school campus, and Dr. and Mrs. E. M. Stansbury of Vermillion."⁴⁹

45. *Ibid.*, p. 316.

46. *Journal Lancet*, LXVII (October, 1947), 372.

47. *Journal Lancet*, LXVI (August, 1946), 259.

48. *South Dakota Journal of Medicine and Pharmacy*, II (August, 1949), 262. In 1949 the association successfully supported the efforts to secure a state appropriation of \$600,000 for the new medical science building on the campus at Vermillion.

49. *South Dakota Journal of Medicine and Pharmacy*, IV (August, 1951), 194.

43. *Proceedings of the House of Delegates*, May 20-22, 1930.

44. *Journal Lancet*, LVII (July, 1938), 315.

AMEF

In addition to private contributions funds were received from the American Medical Education Foundation, an agency of the American Medical Association created for the purpose of subsidizing medical education in the United States. Foundation subsidies were to be sufficiently large that federal aid would be unnecessary. The funds of this foundation were made available by contributions channeled through the various state medical associations. The total amount contributed by the foundation to the University of South Dakota Medical School from 1951 to 1955 was \$43,280.

However, the total contributions made by South Dakota physicians to the foundation during this same period was only \$17,000. The explanation of this difference was the fact that the physicians of the state felt they should contribute to their own local school first. This opinion seemed to be popular in 1955, when 136 South Dakota physicians contributed to the foundation, and 400 others did not.⁵⁰

The South Dakota State Medical Association was disturbed by what seemed to be a lack of support for the foundation. The association feared that when it became apparent that the physicians of the United States together with private interests could not support medical education satisfactorily the federal government would step in with subsidization and its threat of socialized medicine. To ward off any such governmental intervention, the State Medical Association urged the physicians of South Dakota to support the South Dakota Medical School Endowment Association. Letters of appeal were sent to all interested parties asking for contributions. This financial drive, continued into the mid 1950's, increased the endowment fund and thus advanced the cause of medical education in South Dakota.⁵¹

The president's report at the annual meeting in 1953 reflected the above fear of federal intervention. The report carried this theme: "... the private practice of medicine

is at stake unless we keep our medical schools free from government control. That means very little or no government subsidy."⁵²

The profession's fear of socialization had subsided considerably by 1955, and though the association was still mindful of the threat of "state medicine," it ceased to regard socialization as a dangerous problem.

PUBLIC EDUCATION

The association's interest in improving medical practice, its fight against disease, and its struggle to improve medical education brought the realization that public education and enlightenment was essential. If improvements in medical services and education were to come, it would be through an enlightened general public. In order to bring to the people facts concerning medical care, control of disease, public health and sanitation, medical education and socialization, the State Medical Association began a series of radio broadcasts.

The above radio work began in 1933 and 1934, when the association undertook negotiations with radio station WNAX of Yankton. The purpose was to arrange a schedule whereby programs of interest to the profession and to society might be established. The first year of the educational programs resulting from these negotiations began June 1, 1935, and ran through May 31, 1936. Ten local medical districts contributed a total of 53 medical papers which were read over WNAX. However, these programs heard over the Yankton station were discontinued in 1939, because of "coolness on the part of the station because it is a good-will or non-profit broadcast."⁵³

The programs were taken up by station KSOO of Sioux Falls that same year (1939). All papers heard over KSOO were "read by the Secretary of the Seventh [Medical] District, Dr. H. R. Hummer, and in his absence by Dr. P. R. Billingsley."⁵⁴ Support in preparing these papers was received from the Inter-Allied Council and the Women's Auxiliary to the Medical Association. The KSOO

50. *South Dakota Journal of Medicine and Pharmacy*, VIII (August, 1955), 296.

51. Dr. W. L. Hard, the present Dean of the University Medical School, estimates the endowment fund to be about \$10,000, as of June, 1955.

52. *South Dakota Journal of Medicine and Pharmacy*, VI (August, 1953).

53. *Journal Lancet*, LXV (September, 1945), 337. By 1941 station KABR of Aberdeen was also making medical broadcasts for the association.

54. *Journal Lancet*, LXI (July, 1941), 261.

programs continued through 1943, at which time they were discontinued for a period of two years because of a lack of interest. The radio broadcasts were resumed in 1945 at Rapid City. By 1951 the programs were carried on independently in Rapid City, Watertown, Sioux Falls, Aberdeen, and Yankton. However, because of a lack of available funds the programs were presented sporadically and on a district or local level.

To improve professional understanding among its members and to better public relations the association formed a Grievance Committee in 1950. The purpose of this "... innovation was to be that of receiving grievances, investigate the facts, attempt to mediate the disputes, or refer to the proper authority, and to educate the profession in the ethics of the practice of medicine."⁵⁵ The proper functioning of this committee made it easier for the association to mediate in disputes either between patients and physicians or between two or more physicians involving the matter of ethics and to solve problems pertaining to the medical field.

These many contributions of the association to the medical practice depended considerably on state and national legislation. This struggle to maintain strong state laws of regulation and to resist federal laws of control will be the theme of the following chapter.

(To be Continued in June)

55. *South Dakota Journal of Medicine and Pharmacy*, V (August, 1952), 220.

BOOK REVIEW

General Urology by **Dr. Donald R. Smith**, Clinical Professor of Urology at the University of California School of Medicine, San Francisco.

Lange Medical Publications, Los Altos, Calif. — \$4.50.

This textbook is one of a series of handbooks on clinical specialties comprising a concise medical library for practitioners and students. It describes the various diagnostic and therapeutic techniques available for the management of urologic diseases. It is very complete in its details, which are presented in outline form for easy reference. It also contains many fine illustrations, pyelograms, and so on.

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Dr. Austin Edward Smith

A distinguished, internationally known personality in the medical field was the after-dinner speaker at the S.A.M.A. meeting on March 13th. He was Dr. Austin Smith, best known as editor of the J.A.M.A.

Dr. Smith was born in Belleville, Ontario, Canada and received his M.D. and also an honorary LLD from Queen's College. He interned in Yonker's General Hospital in New York and became a naturalized citizen in 1943.

Since 1940, Dr. Smith has been associated with the A.M.A. as medical consultant and later secretary of the Council of Pharmacy and Chemistry and for a number of years, the assistant editor of the J.A.M.A. and Director of the Division of Therapy and Research.

When Dr. Morris Fishbein retired as editor of the J.A.M.A. in 1949, after many years of distinguished service, the logical choice of a successor was Dr. Austin Smith with his intimate knowledge of the workings of the A.M.A., his background of training and experience in clinical medicine, as well as research and teaching; his many activities in the drug industry; his authorship of several books and his many articles on medical topics . . .

The following are a few of the points Dr. Smith emphasized about the responsibilities of tomorrow's doctor in his talk to the S.A.M.A. He compared the medical field of today with that of the past when the doctor's "little black bag" was the main source for diagnosis and relief of symptoms. Today x-rays and electrocardiographs and other apparatus as well as laboratories staffed by competent technicians have contributed to better diagnosis, while the discovery of new

drugs such as the sulfonamides have opened a new era in treatment. No longer are the symptoms being treated but the disease itself, as a result of effective therapeutics made available through the research programs.

Dr. Smith emphasized that boundary lines are not confining people to consulting the local doctor. They are going longer distances to the clinics and hospitals and the doctors of their own choosing. The public today is much better informed about discoveries and developments in the field of medicine thru better communications media such as T.V. and radio and articles in popular magazines.

It is the responsibility of tomorrow's doctor to be aware of what people are thinking, reading and buying in the local drugstores. He needs to keep up with the research and changes in his field and take an active part in educating the public in regard to matters of medical knowledge. As in the present the discovery of polio vaccine has been of significance, so in the future, the cures for cancer, mental illness and other diseases will open up new vistas in the field of medicine.

In 1952, Dr. Smith addressed the 51st annual meeting of the Medical Library Association in Lake Placid, New York. An article in the **Bulletin of the Medical Library Association**, vol. 41, 1953, entitled "Common Publishing Problems" gives a digest of his remarks. In this, the publishing policies of the J.A.M.A. and the A.M.A.'s 9 special journals is discussed. Because of reader interest in the J.A.M.A. it contains original articles, editorials, special reports, news items, abstracts, answers to questions, advertising, and because of the thousands of readers in foreign countries, reports are included from foreign correspondents. In his talk, Dr. Smith told

of a library in Italy in which there was only one copy of the J.A.M.A. and because of its popularity it had to be chained to the table and often there was a line waiting for a chance to read it.

In his talk, Dr. Smith stated that the editorial staff had considered doing away with the advertising, and publishing scientific articles only, but so many A.M.A. members and other readers protested that this idea was abandoned.

An extremely valuable book for the general practitioner, edited by Dr. Austin Smith and Paul L. Wermer is **Modern Treatment: A Guide For General Practice**, Hoeber, 1953. The first chapter on patient-physician relationship is a review of principles, including essentials of diagnosis and treatment, experimental therapy, evaluation of new drugs, responsibility of physicians and medico-legal practice. Many chapters, by fifty-three well-known authors, presents a wealth of practical clinical information about pharmacological principles; clinical immunology; bacterial, viral, rickettsial, and parasitic infections; sulfonamides and antibiotics; blood diseases; water and electrolyte balance; diseases of thyroid and adrenal; diabetes mellitus; obstetrics and geriatrics, and many other topics with modern treatment described in considerable detail.

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"MEDICARE" — FIVE MONTHS

At the time of publication of this issue the military dependents medical care program, "Medicare" is five months of age.

Already a pattern of operation is beginning to emerge. Errors in filling forms are decreasing and speed of handling in the executive office is increasing. Fewer forms are being returned to doctors for revision.

While not all are satisfied with the program, acceptance is at a high level.

Congratulations are in order for the great majority of physicians who file normal charges on Medicare cases. They are the doctors who will make this program a success.

Kudos, too, should go to the Surgeon-Generals' office, Department of the Army, for their cooperation and prompt handling of correspondence and other matters making the program a success.

At the same time, we would be remiss if we did not point to one spot that gives some trouble and undoubtedly will until everyone is thoroughly cognizant of this feature. The fee schedule for Medicare is a maximum schedule for payment. Normal fees should prevail at all times. In a few cases physicians are asking the maximum when normal charges in the community do not reach that fee. This misunderstanding of the intent of the schedule may lead to future adjustments in the program that might not be advantageous to individual physicians. You are urged to read the Physicians Handbook to better understand all the ramifications of the program.

"HEEDLESS HORSEPOWER"

A new deadly disease has the American people in its grip and no miracle drug is in sight to stop its frightful toll of human lives.

Heedless horsepower is the chronic disease of the Age of the Automobile. Its symptoms are many and various. The heavy foot on the accelerator; the eye fixed on the climbing speedometer; the hand on the horn; the mind idling while the car is in high.

In its 23rd annual highway safety publication, "Heedless Horsepower," The Travelers Insurance Companies of Hartford, Conn., point to the fact that 40,000 Americans were killed and 2,368,000 injured in 1956 on U. S. highways. That's an increase of six per cent in fatalities and nearly ten per cent in injuries over 1955's toll.

"The disease of heedless horsepower is highly contagious," the booklet states. It can be spread by an irresponsible word, an inflated claim, a careless example. And everyone who is in a position to influence drivers should learn that horsepower, in the hands of the heedless, is the fundamental cause of our ever-mounting toll of disaster.

In recent years, engineers have made many attempts to feature safety equipment in the new cars. Probably many lives have been spared by safety glass, seat belts, padded instrument panels, all-steel bodies, etc. But these safety devices can be nullified by any combination of speed plus carelessness, thoughtlessness or lack of judgment by the driver behind the wheel.

However, it is the driver, not the manufacturer, the advertiser or the salesman who

must bear the greatest weight of blame. For it is the driver who can control the horsepower and use it safely for his greater ease and convenience. It is the driver who is lectured to, legislated at, prayed for, preached to . . . in every medium of public expressions known to man. And it is the driver who nods sagely, promises readily, and forgets everything but his sense of overwhelming power when he steps on the gas.

Casualty lists on U. S. highways have mounted steadily until in 1956 all records of heedless haste and needless waste were shamefully broken. The facts of human suffering and death speak for themselves.

Human error is by far the biggest single cause of accidents. Figures compiled by The Travelers show that in 96.4 per cent of the fatal crashes last year, the automobile was in apparently good condition. Clear, dry weather prevailed in more than 85 per cent of these instances!

If this year's record is equal to that of 1956, one in 70 Americans will be a statistic . . . a pain wracked survivor, or a name in the obituary column.

BOOK REVIEW

The Fight for Fluoridation

by Donald R. McNeil

Oxford University Press — 114 — Fifth Ave.,
New York 11, N. Y. — \$5.00

This is a history of the battle for fluoridation of public water supplies to prevent dental decay. The author has gone into details of the development of the theories and research involved, and the controversies and struggles that have evolved between the proponents and opponents. As a historian Mr. McNeil has collected all the data possible from all of the important published literature on the subject, as well as original manuscripts and the correspondence of the leading figures.

The story really began with the first investigation of brown-stain mottling of teeth by a young dentist in Colorado Springs in 1901, Dr. Frederick S. McKay. The research that followed to develop the idea of using fluoride, "Nature's tooth decay preventive," in drinking water as a public health measure is compared to the battles for vaccination and pasteurization. Opponents of fluoridation include Christian Scientists, food faddists,

chiropractors, as well as some reputable physicians.

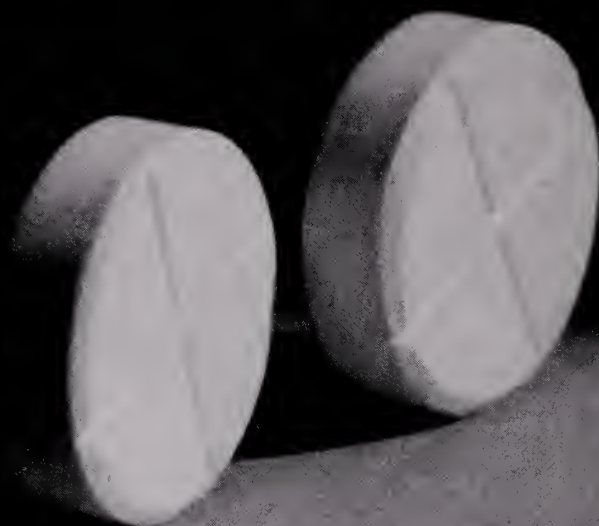
The book should be of interest to South Dakota physicians, since many South Dakota communities now have fluoridation of their water, and others will no doubt be considering the matter in the near future. Two South Dakota dentists, Dr. O. E. Martin, Britton; and Dr. Carl Fossum, Aberdeen, are mentioned in the discussion of mottling of teeth, the investigation of which led to the discovery that the cause was too much fluorine in the drinking water.

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(Continued from Page 161)

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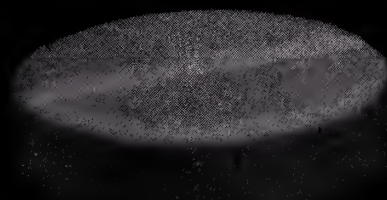
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PROLONGED ACTION: therapeutic blood levels within the hour, blood concentration peaks within 2 hours—5-10 mg. per cent blood levels persist 24 hours after a single oral dose of 1 Gm.

BROAD-RANGE EFFECTIVENESS: KYNEX is particularly efficient in urinary tract infections due to sulfonamide-sensitive organisms, including *E. coli*, *Aerobacter aerogenes*, paracolon bacilli, streptococci, staphylococci, Gram-negative rods, diphtheroides and Gram-positive cocci.

SAFETY: KYNEX offers a margin of clinical safety based on low required dosage, solubility, slow excretion rate. Although KYNEX Sulfamethoxypyridazine is a sulfonamide derivative and the usual precautions regarding such drugs should be observed, the low daily dose of 1.0 Gm. is all that is required for therapeutic blood levels. No increase in dosage is recommended.

CONVENIENCE: The low adult dose of 1 Gm. (2 tablets) per day offers optimal convenience and acceptance to patients.

TABLETS: Each contains 0.5 Gm. (7½ grains) sulfamethoxypyridazine. Bottles of 24 and 100.

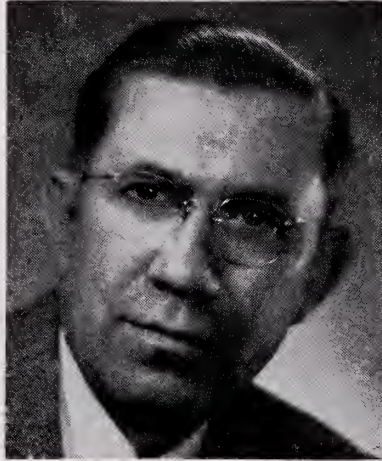
SYRUP: Each teaspoonful (5 cc.) contains 250 mg. sulfamethoxypyridazine. Bottle of 4 fl. oz.

•REG. U. S. PAT. OFF.

LEDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER, NEW YORK



P R E S I D E N T ' S P A G E



Dear Members:

This is the home stretch of my term in office. It has been pleasant and rewarding in that I have had an opportunity to meet many of you and to have worked with you. My efforts, for the Medical Society, I hope, have accomplished a little toward solving some of our problems. It has been a pleasure to have served.

My wife and I attended the annual Medical School Banquet again this year. It was a very interesting and fine affair. Dr. Hard is to be complimented for the fine speakers he has had for these dinners. Dr. Bach, of Iowa University, gave a most inspiring address, entitled, "What Makes a Man Great." It was a very well delivered speech. I wish all of you could have heard it. My wife joins me in saying she enjoyed the dinner, lecture, and dance.

On the 8th, 9th, and 10th of April I attended the Divisional Meeting of the American College of Surgeons, held in St. Paul, at the Lowry Hotel. It was a well attended meeting. We had twelve men there from South Dakota. The papers were excellent. One of the best presented by none other than our Dr. Chet McVay of Yankton, who distinguished himself in his inimitable style.

In attending meetings in our State Organization in the past 28 years, I have been impressed by men such as Dr. Riggs, of Pierre. His intense interest in every paper in any specialty subject, always getting something to use in his practice.

I cannot urge it too strongly that each one of us should take time off and attend and take part in our Local, State, and National Meetings. True, we will not learn it all in one meeting but there are things we pick up which, unbeknown to even the lecturer, is just what we were looking for in our medical problem. We can always learn something and put it to good use, not to mention the invaluable opportunities to meet our friends and make friends with men who are leaders and inspirations in our profession.

We have this wonderful opportunity before us in our annual meeting, held in May, in Sioux Falls. Let us be there and make it one of the best annual meetings. Let us all get better acquainted. Good fellowship and a mutual regard for each other inspires the desire to work with and for each other to promote the good practice of medicine in South Dakota.

I trust that I will be seeing you in Sioux Falls. Until then, I remain,

Yours sincerely,

Alonzo P. Peeke, M.D.
President



This is your MEDICAL ASSOCIATION

S. D. DOCTORS SHOW SUPPORT FOR EDUCATION

South Dakota doctors in 1956 again outdid the doctors of many larger states in contributions to medical education. According to statistics published by the American Medical Education Foundation, 208 of South Dakota's 500 physicians made contributions either to A.M.E.F. or to Alumni Funds. Numerically, more doctors contributed than those from Alaska, Arkansas, Hawaii, Montana, New Mexico, North Dakota, Puerto Rico, and Wyoming.

Interesting to note is the fact that in dollar amounts, South Dakota's total contributions exceeded those of Alaska, Arkansas, Idaho, Maine, Montana, Nevada, New Mexico, North Dakota, Oklahoma, Puerto Rico, Vermont, and Wyoming. Contributions from South Dakota totaled \$8,430.00 and averaged \$40.53.

Other typical averages are Arizona \$15.08, Iowa \$11.28, North Dakota \$45.12, Florida \$37.67, Michigan \$36.39, Minnesota \$27.86, Montana \$43.53, Nebraska \$162.64, Wisconsin \$83.39 and Wyoming \$37.09.

HOSPITAL GROUP MEETS IN HURON

Over one hundred hospital administrators met in Huron, April 8-9, at the regular Spring session of the South Dakota State Hospital Association. Association president E. B. Morrison, Sioux Falls, presided over the program which included papers and panels participated in by Roger Fearon, Mutual of Omaha; C. R. Beck, Western Surety; John C. Foster, Medical Association; Andrew Pattullo, Kellogg Foundation; Rev. Arnold Herbst, Mitchell; R. W. Glenn, Associated Hospitals; and others.

S.A.M.A. DANCE DRAWS CROWD

A capacity crowd of medical school students, doctors and guests gathered at the annual dinner dance at Julian Hall, U. of South Dakota, Saturday, April 6th.

Featured speaker on the program was the noted theologian Dr. Marcus Bach of Iowa City, Iowa. Other highlights of the dinner were the presentation of scholarships and awards and a message from **Dr. A. P. Peeke**, State Medical Association president. Dancing followed the program.

ABERDEEN DISTRICT SOCIETY MEETS

"About 30 members attended the regular monthly meeting of the Aberdeen District Medical Society, which was held in the Mexican Room in the Hotel Sherman, Wednesday evening April 3. About a dozen members of the Woman's Auxiliary met with the Doctors for dinner and then held a separate meeting. The Scientific portion of the session was an excellent presentation on "Cholecystectomy" illustrated with lantern slides."

10 S. D. G.P.'s ATTEND ST. LOUIS MEETINGS

Ten GP's from South Dakota attended the Ninth Assembly of the American Academy of General Practice in St. Louis, Missouri March 23-28. The largest attendance in the history of the Academy was revealed when the final registration figures were given. More than 2,500 physicians from the United States, the territories and foreign countries registered for the scientific sessions and to view the 940 scientific and 150 technical exhibits in the famous Kiel Auditorium.

The South Dakota Chapter was represented at the Congress of Delegates by **J. C. Hagin**, Miller and **A. P. Reding**, Marion with **E. T. Lietzke**, Beresford and **Magni Davidson**, Brookings. President **Howard R. Wold**, Madison and Vice President, **C. E. Johnson**, Belle Fourche also attended, as well as, **Dave J. Buchanan**, Huron, **E. F. Watson**, Garretson, **Herbert Dehli**, Colton and **A. W. Spiry**, Mobridge. Capt. Homer Elieisher of Igloo was a guest.

Several of the ladies, Mesdames Hagin, Reding, Lietzke, Dehli, Davidson and Watson, accompanied their husbands, and were entertained at the social functions.

The 10th annual assembly will be held in Dallas, Texas in March, 1958.

MEDICAL ASSISTANTS SET ORGANIZATION

Eighty doctor's office girls, nurses, and bookkeepers met in Mitchell, Saturday, March 30th to begin organization of a South Dakota Medical Assistants' Association. The organization endorsed nationally by the AMA and in the State by the S.D.S.M.A., intends to form local groups to study ways and means of improving their value to physicians.

Realizing that the office assistant means as much to medical public relations as the doctor himself, the group utilized the services of **Mrs. Carol Towner** of the AMA's public relations department as the morning speaker on their program.

The afternoon session featured a discussion of Medicare and Blue Shield by **John C. Foster**, executive-secretary of the State Medical Association.

SIOUX FALLS DISTRICT PREPARES FOR MEETING

The 7th District Medical Society met at McKennan Hospital Tuesday, April 9th to discuss annual meeting plans and other business. **Dr. W. A. Arneson**, District president, presided at the meeting at which was also discussed local inoculation programs.

SNOW LIMITS 11th DISTRICT ATTENDANCE

Snow and threats of snow limited attendance at an 11th District Medical Society meeting in Mobridge, April 3rd. Only five physicians braved the weather to meet with State Association president, **A. P. Peeke, M.D.** and executive-secretary **Foster**. Discussions on Medicare, Blue Shield and Polio Vaccine rounded out the evening led off by steak dinners at the Bridge Club.

MEAD JOHNSON GRANT

Mead Johnson & Company of Evansville, Indiana has announced that it will double its grant to the Academy's program for Graduate Training in General Practice. Future grants will be \$20,000. Of this amount \$10,000 will be used in a study to improve general practice residencies and to promote the program.

NEWS NOTES

R. S. Westaby, M.D., Martin, has accepted a position with the Convair Division of the General Dynamics Corp. and is now located at Fort Worth, Texas.

* * *

Dr. C. B. McVay, Yanton, was the featured speaker at the Aberdeen District meeting at the Sherman Hotel on April 2. He spoke on gall bladder surgery.

DR. ESTES IS ANNUAL MEETING INTERNIST

J. Earle Estes, M.D., of the Mayo Clinic, will be a featured internist at the annual meeting to be held May 20-21.

Dr. Estes is a graduate of the University of Illinois, and has been with the Mayo Clinic since 1944. He is a member of the Consulting Staff of the Clinic since 1948, and assistant professor of Medicine at the Mayo Foundation since 1953.

DR. BARTH IS ANNUAL MEETING SPEAKER

Dr. Earl Barth, professor of radiology and director of the x-ray department of the University Clinics, Northwestern University, speaks on the annual meeting program, May 20-21.

Dr. Barth is a native of South Dakota, having been born in Olivet, and graduated from Northwestern University in 1928. He has been at Northwestern University since 1931, and was also chief consultant in radiology at the V.A. Research Hospital in Chicago.

He is past-president of the American Roentgen Society, past-vice-president and past chairman of the Executive Council of the American Roentgen Society, and is now chairman of the Board of Chancellors of the American College of Radiology.

His subject will be "Roentgen Examination of the Urinary Tract," and he will also participate in a panel discussion on Heart Disease Tuesday afternoon.



**WOMAN'S AUXILIARY
TO THE AMERICAN
MEDICAL ASSOCIATION
MRS. ROBERT
FLANDERS, PRESIDENT,
1956-1957**

Mrs. Robert Flanders of Manchester, New Hampshire, was installed as president of the Woman's Auxiliary to the American Medical Association on June 14, 1956, at the close of the Thirty-third Annual Meeting in Chicago, Illinois.

Mrs. Flanders first served on the Board of Directors of the Woman's Auxiliary as fourth vice-president and chairman of the organization committee of the Eastern Region in 1948-1949. She was a director for two years, 1950-

1952, and was chairman of the revisions committee in 1952-1953. She has served the Auxiliary on both the finance and executive committees. She was first vice-president and chairman of the organization committee for two years, 1953-1955, and

was the president-elect in 1955-1956.

In 1944-1946 she was president of the Woman's Auxiliary to the New Hampshire Medical Society, and in 1930-1931 she was president of the Woman's Auxiliary to the Hillsboro County Medical Society.

\$1200 In Awards Granted Medical School Students

Awards totalling more than \$1200 were presented to University of South Dakota medical students at the annual Medical School banquet.

Dr. W. L. Hard, Dean of the School of Medicine, said these annual awards, most of them cash, would go a long ways in helping students in their medical program.

Raymond L. Schweinefus, Watertown and Sylvester Wold, Jr., Renner, each received checks for \$150 from the fund established by Dr. Thomas Y. Nakao, Los Angeles, Calif. Dr. Nakao, a graduate of the South Dakota School of Medicine, specified the awards were to be made on the basis of scholarship and proficiency in medical study.

Other award winners:

Stanley R. Nelson, Kidder, \$100 J. A. Kittelson Scholarship; Gerald F. Peppers, Huron, \$100 Kreiser Medical Scholarship; Kreiser Memorial Scholarship, \$50, James C. Larson, Sioux Falls; Donahoe Clinic Medical Scholarship, \$100, Leslie A. Arneson, Garretson: State Medical Association Scholarships, \$100 each, to Harold P. Henrie, Lead; and John Smiley, Deadwood; Yankton Clinic

Medical Scholarships, \$100 each, to Thomas K. Hines, Miller, and Christopher J. Moller, Baltic.

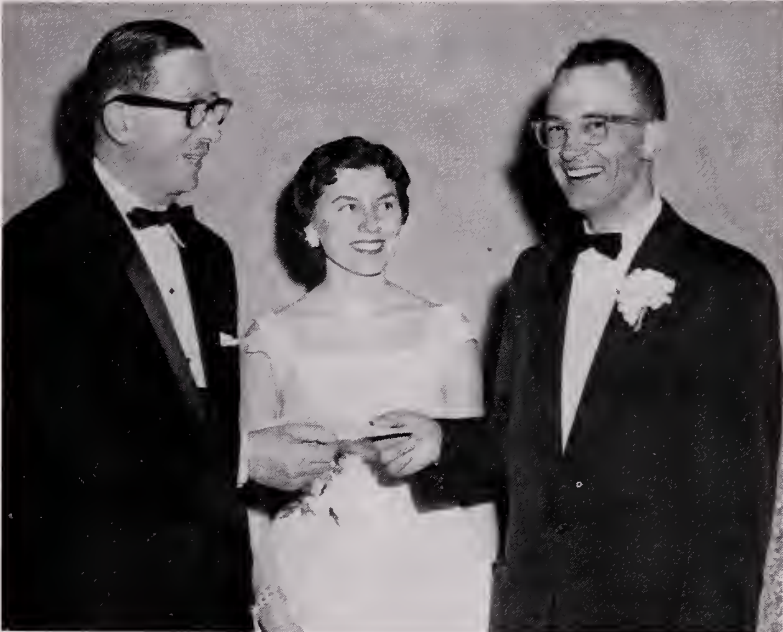
Christian Peter Lommen Scholarship, \$50, Robert I. Wingert, Canistota; Price Award in Anatomy (sculptured book ends), Terry Dyne, Huron; Gold wrist watch awarded by Hoffman-La-Roche, Inc., New Brunswick, N. J., Morton Miller, Chicago, Ill.

C. V. Mosby Book Awards of \$20 each in books, David R. Studenberg, Gregory; Gerald J. Glantz, Chicago, Ill.; Maynard Jonas, Spearfish; John P. Nolan, Moberg; Lyle Munneke, Corsica.

Dr. Hard also presented a distinguished service award to Dr. George T. Jordan, Vermillion, in recognition of the years of service devoted to clinical instruction in the field of otolaryngology and ophthalmology. Dr. Jordan is a 1900 University of South Dakota graduate. He received his M.D. degree from the University of Illinois in 1905 and has contributed more than half a century to medical service.



VERMILLION, S. D. — Dr. W. L. Hard, Dean of the University of South Dakota School of Medicine, presents a distinguished Service Award to Dr. George T. Jordan, Vermillion at the Annual Medical School banquet. The award is in recognition of the years of service devoted to clinical instruction in the field of otolaryngology and ophthalmology. Dr. Jordan is a 1900 University of South Dakota graduate. He obtained his M.D. degree from the University of Illinois in 1905. He has now contributed more than half a century to medical service.



VERMILLION, S. D. — Dr. A. P. Reding, Marion, presents the J. A. Kittleson scholarship of \$100 to Stanley Nelson, Kidder, University of South Dakota medical student at the annual Medical School Banquet in Vermillion. This scholarship award is donated by the S. D. Chapter of the American Academy of General Practice in memory of the late Dr. J. A. Kittleson of Sioux Falls. The award designates exceptional ability and qualifications for medicine. Ann Hasse, formerly of Aberdeen, a senior at USD was the guest of Nelson at the banquet. Nelson a sophomore, obtained his A.B. degree from South Dakota in 1949. He served six years as an Air Force jet pilot before entering medical school. Dr. Reding is alternate delegate to the House of Delegates, American Medical Association.

MEDICAL SCHOOL NEWS NOTES

Second-year medical students at the University of South Dakota are learning to apply their book-learning in the actual diagnosis of disease — thanks to the cooperation of both doctors and patients at three Sioux Falls hospitals.

Sophomore students from the School of Medicine spend their Saturday mornings at the cooperating institutions, the Sioux Valley Hospital, McKennan Hospital and the Royal C. Johnson Veterans Hospital, where they examine patients under the direct supervision of the patients' own doctors.

"The program gives the students their first opportunity to apply basic knowledge in the diagnosis of disease," says Dr. Walter L. Hard, dean of the School of Medicine.

The students, who work in groups of two or three, are assigned to surgery, medicine, obstetrics, pediatrics or neurology, and come in contact with an average of 20 doctors and an equal number of patients during each period.

Dean Hard said an important objective of the program is to help bridge the gap between the student's first two years in the University's School of Medicine and work at some other medical school in the student's junior year.

"Proper diagnosis is obviously a first fundamental in the successful practice of medicine," he said. "For this reason, the students are introduced to this type of training early in their educational career."

The program also has proved popular among the 36 students who make the bus trip to Sioux Falls every Saturday after a long week spent in academic studies.

"It helps fill the gap between textbooks and working with real flesh and blood people," was the way one student, James Larson of Sioux Falls, put it. "We have a chance to apply what we've learned during the week."

Stanley Nelson, Kidder, and Gerald Peppers, Huron, also were full of praise for the program.

"One of the outstanding features has been the interest shown by the physicians in helping us," Nelson said. "It is a very inspiring thing for the student to feel that everyone is willing to help him."

Peppers said: "We learn to apply what we've so far just learned from textbooks. It doesn't really mean much until you work on it, and then you find yourself referring back to your textbooks with new interest and understanding."

Dean Hard said the Sioux Falls hospitals are contributing not only to the training of future physicians but also of medical technologists. These specialists do laboratory work involving blood counting and typing, blood and urine tests, the preparation of pathological tissues for examination, and other tests to aid doctors in diagnosis. Medical technicians completing academic work at USD spend an additional year working at either Sioux

Valley or McKennan Hospital.

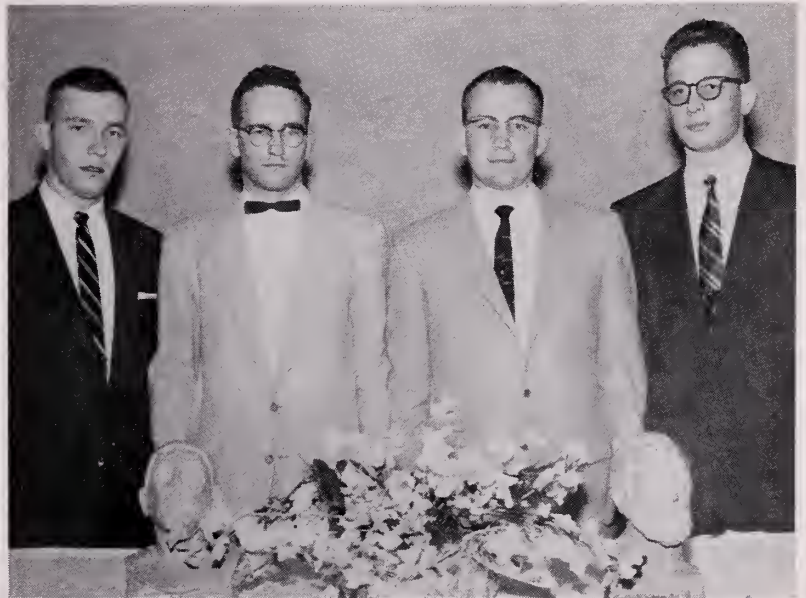
The USD program for medical technicians is approved by the American Medical Association and graduates can receive certification through the American Society for Clinical Pathologists, Dean Hard said.

"Medical technology is a field of growing importance and opportunities are exceptionally good for employ-

ment in hospitals and in the offices and laboratories of physicians," he said.

Dean Hard also expressed the gratitude of the School of Medicine to those cooperating in the training program for USD medical students.

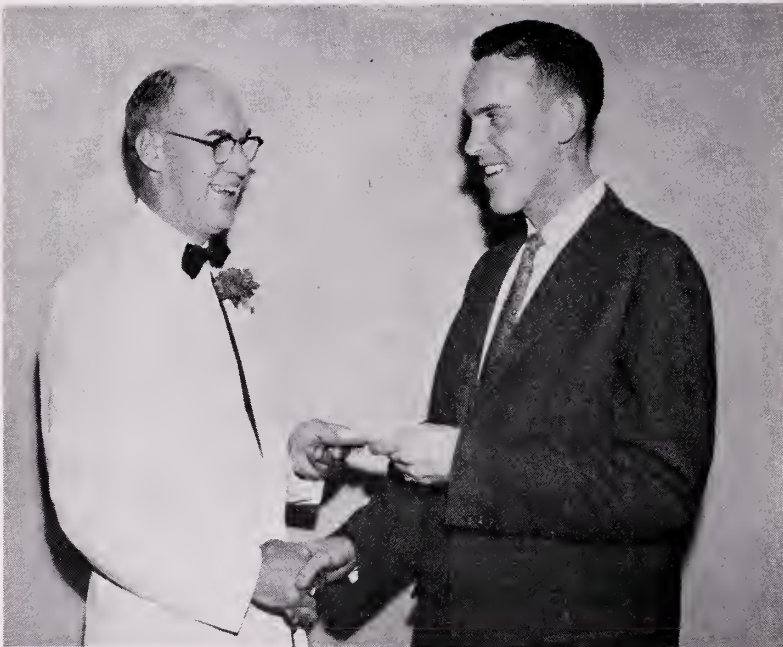
"The cooperating hospitals, the physicians, and above all, the patients, are making a very substantial contribution to the training of the students," he said.



VERMILLION, S. D. — Special award winners at the University of South Dakota Medical School banquet are pictured following the gathering. Left to right: John W. Smiley, Deadwood, who received a \$100 scholarship as the most promising freshman medical student awarded by the S. D. Medical Association; Terry Dynes, Huron, who received the Price Award in Anatomy (pair of sculptured book ends), made available by Dr. Ronald Price, Armour to a student showing outstanding ability in anatomy; Thomas K. Hines, Miller, \$100 scholarship awarded by Yankton Clinic as a student showing outstanding ability in medical study; Morton Miller, Chicago, Ill.; gold wrist watch, awarded by Hoffman-LaRoche, Inc. of New Brunswick, N. J. as a scholarship award for exceptional achievement in medical study.



VERMILLION, S. D. — Dr. W. L. Hard, left, Dean of the University of South Dakota School of Medicine presents checks of \$150 each to sophomore medical students at the annual Medical School banquet in Vermillion. Sylvester Wold, Jr., Renner, center and Raymond L. Schweinefus, Watertown, right, received awards established by Dr. Thomas Y. Nakao, Los Angeles, Cal. Dr. Nakao is a graduate of the South Dakota school of medicine. Awards are on the basis of scholarship and proficiency in medical study.



VERMILLION, S. D. — Leslie A. Arneson, right, of Garretson, University of South Dakota sophomore medical student receives a \$100 check from Dean W. L. Hard as the Donahoe Clinic Medical award. The award, presented at the annual USD Medical School banquet, goes to a sophomore medical student showing special proficiency and promise in the field of physical diagnosis and clinical medicine.

OB-GYN BOARD TO EXAMINE

Applications for certification in the American Board of Obstetrics and Gynecology, new and reopened, for the 1958 Part I Examinations are now being accepted. All candidates are urged to make such application at the earliest possible date. Deadline date for receipt of applications is September 1, 1957. No applications can be accepted after that date.

Candidates for admission to the Examinations are required to submit with their application, a typewritten list of all patients admitted to the hospitals where they practice, for the year preceding their application, or the year prior to their request for reopening of their application. This information is to be attested to by the Record Librarian of the hospital or hospitals where the patients are admitted and submitted on paper 8½ x 11". Necessary detail to be contained in the list of admissions is outlined in the Bulletin and must be followed closely.

Current Bulletins outlining present requirements may be obtained by writing to the Secretary's office, 2105 Adelbert Rd., Cleveland 6, Ohio.

GREGG PAPER—

(Continued from Page 159)

which intestinal lesions may be formed. To date there has been no way described to prevent the formation of such lesions. Treatment involves constant awareness of this complication and aggressive corrective measures if findings suggesting such ulcers appear.

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MAY 1957

PHARMACEUTICAL SECTION



HAROLD S. BAILEY, PH.D.
EDITOR

Division of Pharmacy
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PHARMACEUTICAL *Paper*



THE RESTRICTIVE DRUG SALES PROBLEM*

By

Bliss C. Wilson**

Pierre, South Dakota

Restricting the retail sale of factory packaged drugs and medicines to pharmacists is one of the most urgent problems facing the profession of pharmacy today. Many of the manufacturers of medicines intended for self-medication would have their products retailed as general merchandise within every conceivable place of business. Their advertising says, "You don't need a doctor's prescription for this valuable medicine; buy it at your nearest drug-counter." These so-called "drug counters" in general stores out number legitimate drug stores, even in our own state, by nearly eight to one. Our Board of Pharmacy records now show less than 250 drug stores and more than 1900 patent and proprietary medicine licensees. It is this volume of business outside of the drug stores that the proprietary manufacturer **wants** and that he is going to get, unless pharmacists are controlled and regulated in the retailing of such medicines where others are not so controlled and so regulated.

The average drug store of today is so contaminated with a hodge-podge of general merchandise that the public cannot tell where commercialism ends and where professionalism begins. Most of the packaged drugs and medicines are now handled in drug stores with absolutely no regard for the protection of public health and safety. The Board of Pharmacy has endeavored to restrict sale of

U.S.P. and N.F. drugs to pharmacies on the grounds that they are not prepared or compounded in proprietary form when they are marketed under an official name or synonym. The pharmacist knows the potential danger of official drugs and he can protect public health by warning against such danger. You have been warned, many times, that pharmacists are certain to lose the exclusive sale of official drugs in original packages unless they are, at least, segregated in sales display from articles of general merchandise. If distinction for the public can be made in any other way, I would like to know what it is.

A knowledge of drugs and their potentially harmful effects upon any tissue or organ of the body is of first importance as a requirement for licensure as a Registered Pharmacist. In retailing packaged drugs, pharmacists do have something to sell their customers other than the commodity itself. Pharmacists have knowledge to sell and the sale of knowledge is the only thing that makes pharmacy a profession. Without knowledge pharmacists cannot be of assistance in the protection of public health. Without knowledge of the active ingredients of a medicine that is marketed under a trade-name, you have nothing to sell but the commodity. When you see a drug listed as an active ingredient, you know the potency of that drug and whether public health and safety are endangered in its use, or misuse, or by careless storage in the home. Now, with knowledge,

*Presented at the Pharmaceutical Institute, South Dakota State College, April 10, 1957.

**Secretary, South Dakota Board of Pharmacy.

pharmacists can be of assistance in the protecting of public health when retailing proprietary medicines; BUT — (and this is the way our State Supreme Court put it) — “We are unable to find in the statutes of this state anything which controls the sale of patent and proprietary medicines when made by pharmacists. Their right to sell such medicines seems to be unrestricted. We find nothing which requires druggists to warn the public against any danger in their use, or to assume any responsibility in their sale, or to do anything to protect the public in return for intrusting to them the sale of such medicines. Nor have any regulations of the Board of Pharmacy requiring anything of druggists been called to our attention which can be said to even tend to added security of the public in buying such medicines of druggists.”

The same statement applies today. What's wrong? Pharmacists are not yet required, or expected, to give any VERBAL WARNING against danger. Most pharmacists will give advice when it is requested, but with the volume of packaged medicines sold, this is the exception rather than the rule. Under the proposals, this VERBAL WARNING would be the rule rather than the exception. The right of the Board of Pharmacy to regulate, control and license those practicing the profession of pharmacy is conceded. Pharmacists must decide for themselves how they want to be controlled and regulated.

Verbal Warning a Professional Act

The sole purpose behind all of my proposals is to regain for pharmacists their exclusive right to retail all potentially harmful patent and proprietary medicines. You can be assured that any law or Board of Pharmacy regulation which has for its sole purpose the protection of public health and safety is constitutional and a proper exercise of the police power of the State. However, there can be no unwarranted interference with the business of a citizen, or his right to own and sell property under the guise of the police power, where (this sole purpose) the object sought has no reasonable relation to the means employed to effect the object. Unless pharmacists are required to give verbal warnings against danger, then it is unreasonable to say that they are in any way protecting public health. You may say that a pharmacist should be required to give verbal warning

only when the customer asks for his advice. This might be acceptable provided the pharmacist completed every sale without assistance. Our Supreme Court said, — “If the sale of patent and proprietary medicines is properly to be classed as the practice of pharmacy, then it should be confined to pharmacists, subject to the control and regulations of the profession, with criminal and civil liability in case of malpractice.” Confining a sale to pharmacists could mean that the pharmacist would have to wrap the package, make the change and give final delivery, but none of these acts are professional. Giving verbal warning against danger is the professional act for which the pharmacist alone may be held responsible. In the proposed regulations, we say, “Every person selling or making delivery of any item from the restricted drugs area SHALL be instructed by his pharmacist supervisor — not to sell or deliver — unless the buyer is a responsible adult person who has been warned — ” The transmittal of the knowledge of the pharmacist as directed by the pharmacist and in the actual presence of the pharmacist is a protection to public health only because the pharmacist is there to give further advice if it is needed or requested. I contend that the pharmacist actually makes this sale (through his clerk) and with it he sells his knowledge in the protection of public health. It is on this contention that our most rigid restrictions must be based.

In formulating Rules and Regulations to be adopted by the State Board of Pharmacy, we must bear in mind: FIRST, that their sole object or purpose must be for the protection of public health and safety; SECOND, they must be enforceable; THIRD, they must be reasonable in their application; FOURTH, they must not be in conflict with the provisions of the law under which they are promulgated; and FIFTH, they cannot be legislative in character or go beyond the provisions of law, unless they apply only to a class of citizens who are to be governed by such regulations and then, only with the approval and consent of the governed. This last ascertain is made on the basic principle that “governments are instituted among men, deriving their just powers from the consent of the governed.”

Time will not permit mention of all of the angles of approach which we have made to

this problem. When the lawyers say, "It won't work," or "You can't do that," then you just tear them all up and start from "scratch." Every time you make a new attempt you learn something. The results of trial and error have led to the five ascertains that I have just mentioned. Any argument for striking or amending the proposals as submitted must meet these five requirements.

The Supreme Court of South Dakota urged pharmacists to regulate themselves. This is what the Court said, "Unless the sale of such medicines by pharmacists is regulated, then requiring such sales to be made by pharmacists does not regulate their sale, but merely gives to a class the exclusive right to make unregulated sales of such medicines. Unlimited and unregulated sales by pharmacists may be just as extensive and quite as harmful as unlimited sales by others. Are pharmacists controlled and regulated by law in the sale of such medicines, where others are not? If so, and if the regulations are sufficiently strict to afford real protection to the public, then this law may be sustained." The proposals offered are, in my opinion, sufficiently strict to afford real protection to the public health and safety. Any lesser restrictions in the management of pharmacies would, in my opinion, be questionable. If we leave a loophole any place, somebody is going to find it. They will then take it to the Supreme Court. That loophole can put us right back where we are now.

Revolutionary Changes Needed

A quotation from the April 1, 1957 FDC DRUG LETTER will show you what I mean, "Until now, most food supers have been content to "skim off the cream" in their health and beauty aid depts., but they are now shifting to a new competitive approach in their marketing of proprietary drugs and toiletries. In the past 10 years, supers have gained an additional \$550 mil. a year volume without much additional effort on their part. All they had to do was to stock the leading proprietary and toiletry brands in a convenient self-service dept., and the regular customer traffic took care of the rest." Unless we have a revolutionary change in the physical set-up of pharmacies, unless we have a revolutionary change in the professional management of all pharmacies, unless these revolutionary changes are forced upon phar-

macists through their own self-government, this "drug store business" that we have complacently held to be ours ever since our pharmacy law was enacted is GONE! ! !

Packaged drug sales outside of the legitimate drug store that have been only a mere trickling stream are fast developing into a raging torrent that is carrying along with it traditionally drug store merchandise that pharmacy will never be able to regain except through superior merchandising methods. You cannot recover your "lost sheep" with old merchandising methods. You must be modern. You must beat your general merchandise competitor in his own game. And at the same time, pharmacists must build a dyke around that which is pharmacy so that not even a trickle can get through. The emergency that we have now was all brought on because we did not stop that trickle in time. The Court told us that it could be stopped. They even told us the tools that we had to have to do the job. These tools are set forth in the proposed STATEMENT OF POLICY which was prepared for no other purpose than to explain to non-pharmacists — what pharmacy will be — after pharmacists are controlled and regulated and where those regulations are sufficiently strict to afford real protection to the public health and safety.

The arguments raised at the Sioux Falls convention were not against segregated display or maintaining a restricted drug area but they were against isolating, closing and locking that restricted drug area before the pharmacist left the premises. Why did they object to closing and locking that which is pharmacy when no sale can legally be made in the absence of a pharmacist? They want to bootleg. How can one inspector in the whole state stop bootlegging in pharmacies, unless that which is pharmacy is closed for the transaction of business as provided by law? When the inspector calls he can see at a glance that pharmacy services are locked up as the law provides. If they are not locked up, then he must report the violation. The first time may be just a warning. The second time you receive a notice by certified mail to show good cause why your permit to conduct a pharmacy should not be revoked. If there is a third violation, you may receive notice to appear in person before the Board

of Pharmacy and show good cause why your personal certificate to practice pharmacy should not be suspended or revoked. That is the only kind of enforcement that will make pharmacy a respectable profession.

There has to be a way to eliminate from the profession those who would wilfully weaken and destroy the profession. The first duty of the Board of Pharmacy is to control and regulate pharmacists and those who are qualified by learning to protect public health. The Board cannot in any way regulate the patent medicine licensee. All that he can sell are the items which are unregulated under the law of this state. The laws of the state are no better than their enforcement. Just remember, that anything which the pharmacist permits his unlicensed clerk to sell and deliver in his absence can be sold under a patent medicine license by general merchants. If you let these clerks compound or dispense drugs in your absence, then the general merchant can compound and dispense. Why not? Your unlicensed clerk can give no more public health protection than the general merchant. Mere ownership does not count. It has no reasonable relation to public health protection. Active, on-the-job management is the only thing that counts. That's why I contend that no pharmacy exists when the pharmacist is not actually present.

The household remedy license is authorized only when no pharmacist is available to supply health needs to a community situated not less than eight miles from an existing pharmacy. To be eligible for the license to sell selected household remedies, the applicant must hold a certificate of registration by examinations in such selected household remedies. This Certificate of Registration is authorized by Board of Pharmacy Regulations and it too may be suspended or revoked for evidence of pharmacy law violation. Since these individuals act only as a substitute for pharmacists and in the absence of an available pharmacist, they must be regulated and governed in exactly the same manner as pharmacists. The registrant has knowledge to sell, but only on the selected items he is authorized to sell. No sale can be made when a registrant is not on duty and in charge. To insure this, he must close and lock the household remedies before he leaves the premises. Our inspector can tell at a glance if the laws

are being complied with. If there is violation, then he gets the same treatment as the pharmacist. As soon as he realizes that he can lose his right to obtain the license to sell, it will not be very hard to get compliance. My proposals recommend examinations on combination household remedies. This would permit the regulated sale of potentially harmful proprietary medicines such as "Anacin," "Bromo-Seltzer," etc. which may now be sold under a patent medicine license.

Poison License Certificates

The Board of Pharmacy has postponed the effective date of regulations providing for the issuance of individual poison license certificates. The application form approved for such individual license certificates is a sworn statement that the applicant will abide by the provisions of law relative to the retail sale of certain poisons and that he will segregate the sales display of such poisons from any sales display of general merchandise when he is the owner or manager of the business where-in such poisons are to be sold. We cannot ask the poison licensee to segregate until the pharmacist is required to segregate. By licensing the individual seller, this certificate which would otherwise be renewable for life may be revoked for any law violation. A revoked certificate cannot be reinstated until the previous holder shall show good cause why it should not be denied. Every individual who sells when not under the actual vision and supervision of a pharmacist must have this personal poison license certificate. He must have his own individual poison register. In lieu of being qualified by learning, he must have the buyer sign his poison register. Here is protection of public health and safety, without knowledge, but the customer has been warned and you have it in writing. The poison licensee will retain a copy of his sworn statements. It would not be a bad idea to have pharmacists sign the same sworn statements. Then they would know what the Poison Law actually provides.

When, and if, pharmacists approve and adopt the proposals, we will have three types of individuals licensed by the Board of Pharmacy against which pharmacy laws and Board regulations may be enforced effectively. The suspension or revocation of a personal license certificate is a more severe penalty than paying a small fine or even

going to jail.

Patent Medicine Licenses

When the Anti-Self-Service proposals were approved and endorsed at the Huron Convention, it was on the assumption that there would be no more patent and proprietary medicine licensees. Reason dictates that any medicine intended for human use that will not impair the normal functions of any tissues or organ of the body of children between the ages of six months and six years when such medicine is applied externally or taken internally by such children in quantities which they might take before consumption is observed is harmless. No warning is needed against danger in their sale. There is no threat to public health and safety, therefore, the retail sale of such medicines should continue to be unregulated under the laws of this state. Such medicines will be exempted from segregated display and regulated sale by pharmacists and household remedy licensees. What these medicines will be, I cannot say. But I can say that the Board of Pharmacy cannot designate any such medicines by their trade-name until the manufacturer submits evidence supported by the opinion of experts that such medicines are harmless.

We cannot cut out the patent medicine licensee from selling potent medicines on a moment's notice; it will take time to set up your restricted drug areas in drug stores and train your personnel. If the proposals are to be reconsidered and adopted, we will have to allow approximately one full year before their effective date. I know that there is a lot of opposition to my thinking. I hope the remarks I am making today will soften some of this opposition and make pharmacists realize the urgency of the situation as I see it.

If the proposals are to be reconsidered at the Rapid City convention, then I must send official notice to every member of the South Dakota Pharmaceutical Association at least thirty days prior to the convention. We are lucky that every person licensed to practice pharmacy in South Dakota is automatically a member of our state association. If we had to depend on voluntary memberships, our association could not control and regulate those pharmacists who were not members of the association. Any self-government would have to be by a code of ethics. A code of ethics is a moral obligation. You would have

to persuade non-members to voluntarily go along with your code of ethics. Our association is a legal body, therefore, (and this is the opinion of an assistant attorney general) our association can make regulations governing all practicing pharmacists in the state and such regulations can be enforced by the State Board of Pharmacy even to the suspending of personal certificates which is the legal requirement for membership.

I can see a future in pharmacy for these young men and women who are in our college today, if the profession is controlled and regulated. But I can see no future for them, if we are going to let pharmacy slip away from us like we are doing today.



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PHARMACEUTICAL *Paper*



IDEAS FOR SIMPLIFYING THE PRESCRIPTION WORK OF THE PHARMACIST*

by Virgil A. Vergin**
Minneapolis, Minnesota

Work simplification technique should be a constant thought among the pharmacists of today. Simplification is one method in which we can compete as retail merchants and professional people in this day of H-bombs, jet propulsion, super markets and extreme modernization. It is true that the unusual number of new antibiotics, steroids and other new drugs have brought the pharmacist a steady increase in dollar volume in his prescription department. But at the same time this period of modernization has also brought more than proportionate increases in taxes, tax and miscellaneous accounting records, increased inventories and a tendency toward lower gross profit because of expensive prescription products which are sold at a lower margin. There is therefore a tendency toward less net profit and as a result more profit must be recovered by increased dollar sales through maximum work efficiency and more work output per employee through simplification ideas. Let not work simplification be confused with speed of performance. Work simplification or speed must not be something to interfere with accuracy of the practicing pharmacist. Never sacrifice accuracy for speed. Generally speaking, work simplification leads to increased accuracy with less chance of error.

*Presented to the 18th Continuation Study Course in Pharmacy, University of Minnesota.

**Chief Pharmacist, Keller Drug Company, Store No. 1, Minneapolis.

Proper Prescription Department Arrangement

Work simplification begins with proper prescription department arrangement. Not enough thought can be given to this very important item. The wear of the floor tile, the pleasant or unpleasant personality of the pharmacists are factors which will indicate some of the failures in the prescription department arrangement. We will not discuss the prescription department layout because this will vary from store to store. Let us merely discuss the arrangement of the pull drawer systems. The simplest and most practical method of arrangement is to have certain areas of pull drawers arranged to contain different dosage forms. An ideal arrangement would contain pull drawer areas for the following dosage forms: official and specialty elixirs; official and specialty syrups; eye, ear, nose and throat preparations; specialty liquids not classified as syrups or elixirs; official and specialty lotions; official and specialty solutions; fast moving tablets and capsules in large containers in large pull drawers; a section for vaginal preparations; ointments in tubes; and bulk ointments would nearly complete the different dosage forms. By using this system a pharmacist merely has to determine the dosage form of a prescription and consult the corresponding pull drawer system to obtain the item.

The location of the telephone in the prescription department is naturally important.

It should be arranged near the busy working area for convenience in answering. About seventy-five percent of the telephone calls in the average drug store require a pharmacist to answer, so why not make it your store policy to have the pharmacist answer the phone or have a pharmacist immediately available to answer. There is nothing that aggravates or irritates a doctor as much as having someone else other than a pharmacist answer the phone and wait until that person tries to find the pharmacist to take the doctor's call.

Eliminate wasted effort and time at the beginning of the telephone conversation by telling who you are. Speak clearly in a normal tone, get to the point of your conversation and use a vocabulary of words which the average person understands. Adapt your manner and presentation to the customer's tone, inflection, rate of speech, use of words which reveal his intelligence and social standing. Sincerity, interest and service on your part can add effectiveness and efficiency to your telephone sales and calls.

I feel that a new product section is essential in the pharmacies of today. It is true that this section does not pertain directly to work efficiency, but tell me how efficient is a pharmacist of today if he is not supplied to the hilt with new product information. A new product section is an excellent prestige builder and advertising media for your doctors if displayed in an area where they will pass. It is also a constant reminder to the pharmacists of the new products now available and there will not be any hesitation for supplying information when the opportunity presents itself. A trained pharmacist of today who can supply information on products at a second's notice is the successful pharmacist. Along with the new product section should be available information on products in brief descriptive circulars supplied by pharmaceutical houses. A simple filing cabinet is an excellent way to keep this information ready for use by the doctor and you.

With the new product section naturally must belong an area for continual return of outdated and obsolete products. The only difference here being it is an area you usually do not display, except possibly to the pharmaceutical detail man. The area can be any area, even an old box hidden in a corner. The

important idea is to continually remind you to return outdated, obsolete or products which do not turn over. You are all aware of the rising inventories due to new products and this method of returning items is one way to maintain a good balance of moving items. Disgusted comments on the multiplicity of new drugs and drug products are often heard and duplication of these items is a disadvantage it is true, but let us accept the advantages and importance of these new drugs and drug products. Never before in the history of pharmacy has the doctor had a better selection of drugs for a specific use. Through these markets of new drugs and drug products your prescription volume is today what it never has been and it will continue to grow in the future.

An excellent efficiency idea in any prescription department is to have a few fast moving items arranged for easy accessibility. This idea can be worked out in any store, whether it be a small shelf or a small drawer. Items such as thyroid, phenobarbital and penicillin tablets can be placed within an arms reach to save steps and hasten filling of certain routine prescriptions.

Proper Prescription Department Equipment

The use of reference books, especially pharmaceutical catalogs which contain product information, are an important addition to any pharmacy. Most pharmaceutical companies are now standardizing their catalogs to contain two sections, one for prices net and retail, and one for product information. Other books which are of benefit to the pharmacist other than the official compendia are "The Physician's Desk Reference," "Merck Manual," "Merck Index," "Remington's Practice of Pharmacy," and "New and Modern Therapeutics."

The refrigeration area in the prescription department perhaps is the most expanding area today. Because of the variety of antibiotic products, insulins, suppositories, injectable enzymes, allergenic extracts, oral culture preparations, vaccines including the new poliomyelitis vaccine and many other prescription products which require refrigeration, more consideration will have to be given toward expanding present facilities for refrigeration area.

There are requirements by law regarding prescription department equipment. You are

all familiar with standard equipment, so we will discuss only additional equipment or gadgets which simplify our work. There are many labor saving gadgets and techniques which pharmacists use in their every day work. It seems that all Americans are gadget minded and we as pharmacists are typical Americans.

First, there is the Toledo Speedweigh Scale. This will actually save you minutes every time you make a weighing. It is not meant to replace the Torsion balance, but is used to weigh quantities larger than 1 Gm. This scale has a capacity of 2500 Gms. or approximately 5 pounds. You can weigh up to 500 Gms. on the beam. Separate weights must be used for heavier weighings. You can read a weighing up to 25 Gms. or up to 25 Gms. more or less than the weight on the beams which speed the process. It is also easy to weigh directly into the container to be used or dispensed.

Then there is the Osterizer or blender. It is ideal for crushing tablets and mixing powders. This is an ordinary commercial blender which has a motor speed of about 22,000 RPM. In grinding up 500 tablets, this device saves from 2 to 4 hours than by using the mortar and pestle technique.

Another household device converted to the use of the professional pharmacist is the electric beater. This will save the average pharmacist at least ten minutes time in making a 6 oz. lotion. The ingredients are mixed directly into a wide mouth bottle in which it is dispensed, thus saving valuable time spent in washing dishes as well as the time saved in compounding.

Other items are the tablet counter which is used in precounting tablets or useful in counting large quantities of tablets. This tablet counter was designed and made by Lawrence H. Mueller.

A rubber plate scraper is a handy gadget for cleaning ointment jars and mortars.

A soda spoon, long handled and redesigned is also ideal for cleaning jars and mixing heavy lotions or mixtures which have settled and compacted to the bottom of the container.

Use an adjustable measuring spoon to fill powder papers. It is much more accurate than the eye and saves the time of putting each paper on a balance.

A plastic mustard dispenser is ideal for

coal tar, etc. This will eliminate messy spatulas and sticky edges on bottles.

Several items can be used to aid the weary pharmacist in opening sticky bottle caps. A circular type diaphragm cut from a flat piece of rubber or a rubber tubing used as a rubber ring aid greatly in opening bottle caps.

Proper Use and Affixing of Essential Labels

Next in importance to the correct ingredients in a prescription is the proper use of prescription and accessory labels. Proper use and affixing of essential labels begins with use of an appropriate label dispenser and label cabinet. The label dispenser should be located slightly above the typewriter and be of an elongated type with different size compartments cut exactly to fit prescription labels. We think of a label cabinet as a small cabinet with narrow pull drawers which contain assorted size compartments to hold printed labels for official drugs, drug products and specialty items which are sold over the counter. Labels for such preparations as glycerin, sweet oil, anise oil, clove oil, olive oil, decolorized tincture of iodides, sweet spirit of nitre, benedict's solution, dobell's solution, elixir terpin hydrate with codeine, spirit of camphor and many others can be arranged alphabetically in this cabinet. When you get a call from a customer for any of these items, it is a simple task to merely dispense the quantity of preparation desired and label. If these labels are supplied through your regular channels, they will comply with Federal and State Law giving proper instructions for use, contra indications and antidotes if a poison. Typing a label at the spur of the moment for any of these items is a time consuming task and the space allotted on a regular stock label is not large enough to include complete directions for use.

Labels for trade marked specialties can also be stocked in this cabinet and the same procedure is used for dispensing trade marked specialties over the counter. Examples of commonly sold trade marked specialties over the counter are neo silvol, argyrol, cosanyl, cheracol, tincture of merthiolate, tincture of metaphen, etc.

You are all familiar with the use of stock utility strip labels, such as the "shake well" and "external use only." The stock utility strip label can be an extra precautionary instruction to the patient or it can be a worded

phrase to simplify the work of the pharmacist. Our Minnesota state law states that barbiturates must be dispensed with a "use only as directed" sticker attached to the prescription. This is an extra precautionary measure taken to prevent over usage of barbiturates. The use of the phrase, "not to be swallowed" is a precautionary measure to prevent swallowing of poisonous medications used as a gargle.

Let us consider several specially worded phrases or sentences which can be added to prescriptions as stock utility strip labels. The following sticker can be applied to narcotic prescriptions, "Cannot be refilled without new prescription. If more medication is needed arrange for a new prescription. Telephone orders not accepted." This sticker will save explanation to the patient and they in turn will not be delayed if more medication is needed. The following sticker can be applied to telephoned acceptable narcotics, barbiturates, and potent medications or legend drugs: "This medicine is intended for you only in your present condition and cannot be refilled without consent of your physician. Consult him before requesting a refill." This is an indirect way of speeding a refill, because when you call for consent to refill a prescription, the doctor may already have been forewarned of the patient's desire for more medication.

A plastic flat container with separate compartments, such as a silverware tray, makes an ideal convenient method to contain stock utility strip labels.

Affixing of labels on prescription items, which come prepackaged and are of small or odd size, is sometimes a problem. When dispensing antibiotic pediatric drops or similar preparations, it is wise to put only the prescription number itself on the container and place a second complete label on the outside package of the preparation. When dispensing antibiotic pediatric drops it is also always wise to include the directions, "use orally or internally." There is always the possibility that the mother is not instructed in the use of such a preparation. If her physician has diagnosed her child's trouble as ear infection, she is likely to drop the antibiotic pediatric drops in the ear or in other instances even the eye or nose if the child has a corresponding infection. If the anti-

biotic pediatric prescription calls for a definite number of milligrams in the directions include the words "blank number of milligrams on dropper level given internally" in the directions to the mother. Invariably if you use the words "blank milligrams" without including "dropper level," they will call you and of course your time will be spent in explaining the use of the dropper.

When dispensing ophthalmic ointments, place a small amount of cotton in a vial and place the ophthalmic tube upright in the vial. This will prevent any leakage of ointment and present a convenient package for carrying or placing in the medicine chest.

Ophthalmic solutions are preparations where utmost care must be used in dispensing and labeling. In labeling atropine ophthalmic drops, it is wise to include additional instructions such as these, "poison if taken internally." Here, even one drop of a one per cent solution is an over dosage and naturally this bottle must never be confused with any other oral drop medication the patient may be taking.

Certain chemicals such as the undecylenates and antihistaminics in ointment form often bleach the color and type of a label over a period of time. Any plastic spray or label varnish will prevent this reaction. Scotch tape over such a label will prove almost as satisfactory.

Many of the packaged ointment tube preparations are now being labeled with a plastic material. If you have difficulty in removal of this type label and spend minutes scratching and disfiguring the tube, run hot water over the tube for a few seconds. The heat will expand the plastic from the tube and make removal of the label very easy.

There are several bomb type plastic sprays which can be used to preserve labels. They are inexpensive and convenient to apply. There are commercial brands available for less than \$1.00. Labels on stock containers or bottles which are handled many times can also be sprayed.

The inclusion of formulas on labels of containers for stock preparations saves the pharmacist much time. Such preparations as popular as dilute hydrochloric acid and saturated solution of potassium iodide can be compounded without consulting a reference book. Stock containers which are used for

dispensing should contain on the label the net cost per unit of one hundred or net cost per pint; the actual net cost of purchase made in quantities over one hundred, or in gallons; the capacity of the container; and the prescription selling price in units from six to one hundred or from ounces to pints. The capacity of the container and the actual net cost will greatly assist in taking inventory. Labeled prescription prices naturally save computation time.

Packaging prescriptions is a natural sore spot among many pharmacies. A prescription is a professional product and it must be treated as such when conveyed or handed to the patient. A properly, neatly packaged prescription builds prestige for a store and denotes the care and study with which you have compounded many times a priceless item. The use of utility envelopes, either plain or printed with advertising material, offers a convenient and dignified package. These are made available in many sizes to fit most packaged prescriptions.

Prescription Pricing

Until recently prescription pricing was not uniform throughout our stores. Through the efforts of our Minnesota State Association, much has been accomplished toward uniform pricing. As has been mentioned before, nothing is as degrading to a profession as lack of uniformity in prescription pricing. There can be no uniform pricing established unless through a schedule. Here we advise using the schedules supplied by our association. This schedule is not only one of the greatest time savers you will ever use, but also establishes uniformity among our stores. Using the schedule will also guarantee a fair margin to you without over taxation of your customers. Slightly more than a 50% gross profit is necessary to maintain a successful prescription operation. Use of the Minnesota State Pharmaceutical Association Pricing Schedules will be a helpful guarantee in maintaining that margin.

Inventory Control

With a trend toward increased inventories in the prescription department, it is quite essential to maintain an inventory control of some type especially for large lines of prescription products or special discount deals. There are standard type inventory control cards which can be used for inventory con-

trol. Several pharmaceutical companies also supply inventory cards for their products and will donate their salesmen's time in checking these cards. There are other methods used toward inventory control. New products can actually be dated on package with purchase date or a color scheme can be used whereby an item is marked with different color tab or crayon. Each color denotes a certain month's purchase. In controlling inventory on biological products, where you stock more than one item, it is wise to use a number system on each package of that item. The package with the shortest expiration date is marked with the lowest number so that it will be sold before the packages with longer expiration dates.

Compounding Technique

Much time can be saved in compounding prescriptions if you employ the use of a few concentrates. Two alkaloidal solutions, codeine phosphate in concentration of one grain per cc. or dilaudid hydrochloride in concentration of one half grain per fluid dram, are ideal for compounding cough syrups. Eutectic combinations such as menthol and phenol can be liquified in certain combinations and added to lotions and ointments. Such a eutectic combination can be stocked in a dropper bottle with a graduated dropper for convenience in compounding. Gentian violet solutions are always messy preparations. Even if you are exceptionally careful in weighing, gentian violet powder is very light and of course in the presence of moisture, gentian violet stains will appear out of nowhere. A concentrated solution such as a 10% solution is more convenient and less messy for making weaker solutions through dilution.

White Lotion can be made easily by having prepared two solutions, zinc sulfate and liver of sulfur. When preparing white lotion fresh it is then a simple, fast process by adding the liver of sulfur solution to the zinc solution.

Zinc sulfate solution in concentration of 1 grain per cc. can be used to aid in preparation of ophthalmic prescriptions.

Solution of ammonium acetate can be quickly prepared by having a solution of acetic acid and ammonium carbonate prepared in the correct proportions.

(Continued on Page 202)



Ask to see the new
WELCH ALLYN



No. 777

"Professional"
FLASHLIGHT

A Better Case for Better Instruments by WELCH ALLYN

This is Welch Allyn's new No. 23 polyethylene one piece molded case for otoscope-ophthalmoscope sets. Can be washed or sterilized with standard germicides, extremely compact and practically indestructible. Holds Welch Allyn operating or diagnostic otoscope attached to medium battery handle ready for use, plus any WA ophthalmoscope head, spare lamps and 5 otoscope specula. Available separately for use with existing Welch Allyn sets with medium handle or as part of complete new sets.

No. 23 Polyethylene Case only\$5.00

KREISER'S INC.

SURGICAL DIVISION

Minnesota Ave. & 21st St.

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Free the anemic
FROM
IRON INTOLERANCE

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FERGON[®]

BRAND OF FERROUS GLUCONATE

FOR ALL SIMPLE IRON DEFICIENCY ANEMIAS

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high
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SUPPLIED: Fergon tablets of 5 grains, bottles of 100 and 500.
Fergon tablets of 2½ grains, bottles of 100.
Fergon elixir 6% (5 grains per teaspoonful),
bottles of 16 fl. oz.



RECENT PHARMACEUTICAL *Specialties*

PERITRATE SUSTAINED ACTION

Description: A new long-acting form of Peritrate (pentaerythritol tetranitrate) combining 20 mg. of Peritrate (plain) with 60 mg. of Peritrate in a special wax base, which gradually releases the ingredient over a twelve-hour period.

Uses: To provide round-the-clock protection against attacks of angina pectoris.

Produces prolonged coronary vasodilation, reduces the frequency and severity of attack, reduces nitroglycerine dependence, increases exercise tolerance, improves abnormal EKG findings.

Dosage: Usual dosage two tablets daily.

How supplied: 80 mg. tablets in bottles of 100 and 500.

Source: Warner-Chilcott Laboratories.

METRETON OPHTHALMIC SUSPENSION

Description: A corticoid-antihistamine combination containing chlor-trimeton 0.3% and meticortelone (prednisolone) acetate 0.2% in a buffered solution for use in the eye.

Uses: For the treatment of exudative and inflammatory phases of ocular disorders, such as allergic conjunctivitis and blepharitis; iritis and iridocyclitis; keratitis and scleritis. The suspension quickly relieves the allergic "red eye" from itching, burning and tearing and, when used prophylactically following ocular surgery and removal of simple foreign bodies, reduces the likelihood of ocular scarring.

Dosage: For topical application in the eye.

How supplied: Dropper bottles, 5 cc.

Source: Schering Corporation.

SUAVITIL

Description: Compressed scored tablets con-

taining 1.0 mg. of benactyzine hydrochloride (2-diethylaminoethyl benzilate HC1).

Uses: A centrally acting psychotherapeutic agent with selective activity on various functions of the brain. It is believed to work essentially by inhibiting the transmission of nerve impulses between neurons.

Suavatil is described as an antiphobic (removing phobias of fear), anti-ruminant (removing repititious worrying) "mood normalizer." It has been successfully used in psychosomatic disorders, mild depression states, compulsive disorders, and fear-induced anxiety states.

How supplied: Bottles of 100 and 1000.

Source: Merck, Sharpe and Dohme.

TEDRAL PEDIATRIC SUSPENSION

Description: An anise-flavored suspension containing a combination of theophylline, ephedrine hydrochloride, and phenobarbital, yellow in color.

Uses: Provides quick yet long-lasting relief of asthma for pediatric patients. Relaxes bronchial smooth muscle, reduces mucous congestion, and exerts mildly sedative effect.

How supplied: 8 oz. bottles. **Please Note:** Tedral Suspension should not be substituted for new Tedral Pediatric Suspension, which is half the strength. Because Tedral Pediatric Suspension is yellow and Tedral Suspension is green, they are readily distinguishable.

Source: Warner-Chilcott Laboratories.

CELONTIN

Description: N-methyl-a,a-methylphenylsuccinimide.

Uses: A new anticonvulsant for the treatment of petit mal and psychomotor seizures. It has proved effective in reducing the frequency of seizures among patients whose petit mal attacks were not controlled by other medications.

How supplied: In Kapseal form in bottles of 100.

Source: Parke-Davis.

DOXEGEST

Description: Di-phasic tablets of hemicellulase, pancreatin, betaine HCl, papain, ketocholic acid and desoxycholic acid.

Uses: Enzyme therapy of such symptoms of the maldigestion syndrome as vague epigastric distress, flatulence, food intolerance, dyspepsia and anorexia. Also recommended in treating pancreatitis, subtotal gastrectomy, post cholecystectomy symptoms and chronic cholecystitis.

How supplied: Bottles of 100 tablets.

Source: George A. Breon Co.

VERGIN PAPER—

(Continued from Page 199)

Solution of potassium citrate is also quickly prepared by stocking a solution of potassium bicarbonate and citric acid.

Capsule filling can be made easier by placing a thin sheet of sponge rubber about ½" thick under the powder paper. Capsules fill easier and light powders have a tendency to work back toward the center of your powder eliminating stamping or pressing with a spatula.

An ideal container for weighing bulk products is a waxed milk carton with the top removed. This method saves tearing paper for transfer of the powder to the container.

Graduates or other containers when used for measuring oils can be easily cleaned if they are film coated with a layer of a hydrophilic ointment base prior to measuring. Rinsing under hot water cleans the utensil easily and quickly.

for "the butterfly stomach"



Pavatrine® with Phenobarbital

125 mg.

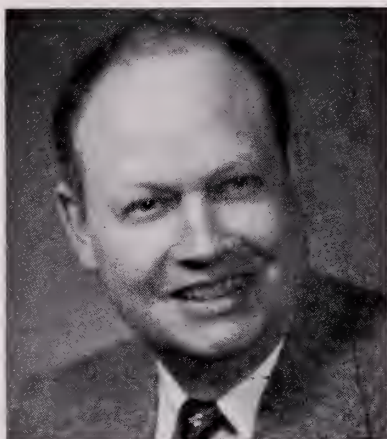
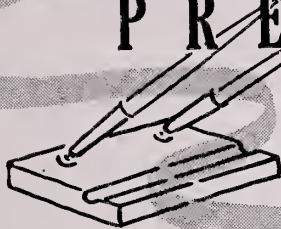
15 mg.

- *is an effective dual antispasmodic*
- *combining musculotropic and neurotropic action with mild central nervous system sedation.*

dosage: one tablet before each meal and at bedtime.

SEARLE

P R E S I D E N T ' S P A G E



Fellow Pharmacists:

On page seventy of the April 1st issue of Drug Topics a list of special days for the coming year is printed. You can save time for your help and yourself by cutting this out and tacking it up in your prescription room. Someone is always asking when such and such a day is. This way you can give them an exact answer. It also will help you remember to tie in your window trimming with the special days.

One thing I always notice when I go through a town is that the drug store windows are nearly always the neatest and most attractive on the street. (This in turn always reminds me of the Saturday morning session on window display with Clark T.)

It seems that this year has been a hard one for druggists, as we have had several pass away. The three latest I know of are Dean Serles, Geo. Lippert and Mr. D. Roche. I would like to be able to attend all these funerals, but sometimes it just isn't possible. I did attend Dean Serles funeral at Alexandria in March, and had a chance to talk to his good wife Daphne. Also got to see several druggists from all over the state who were there to pay their respects. We received a nice card from Mrs. Roche and a long letter from Mrs. Lippert. These things we cherish in this fast changing life of ours.

Have received several notes and letters on the contents of this page, so at least I know a few are reading it.

Al Knutson, President

R_x PHARMACY

News

RAPID CITY PLANS OUTSTANDING 71st CONVENTION

Committee plans insure an outstanding program for the 71st annual convention of the South Dakota State Pharmaceutical Association, according to **Ken T. Eer Nisse**, General Chairman and Local Secretary.

The convention will be held at the Sheraton-Johnson Hotel, Rapid City, June 20-22.

Speakers at the business sessions Friday afternoon include **John F. Lee**, Director, Sales Personnel Relations Division of Eli Lilly & Co. and **Harold S. Bailey**, Division of Pharmacy, South Dakota State College.

Mr. Lee will discuss "Merchandising Your Profession for Profit and Prestige" and Dr. Bailey will present the results of the 1956 South Dakota Prescription Survey. Two films will also be shown — "To Your Good Health" sponsored by the National Wholesale Drug Association and "Going Our Way" sponsored by Parke Davis and Company.

Saturday morning speakers include **Maurice Kerr**, Food and Drug Administration; **Frank Sojat**, District Super-

visor, Bureau of Narcotics; **W. E. Powers**, Secretary of the National Pharmaceutical Council; and **Dean Curtis Waldon**, College of Pharmacy of the University of Colorado.

The outline of the complete program is as follows:

Thursday, June 20

Afternoon - Registration
Recreation

Friday, June 21

Morning - First General
Session

Noon - Luncheon

Afternoon — Second General
Session

Evening - Family picnic
and Entertainment

(Sponsored by Allied
Travellers)

Saturday, June 22

Morning - Third General
Session

Noon - Veterans Luncheon

Afternoon - Closed Business
Session

Evening - Annual Banquet

In announcing convention plans, Chairman Eer Nisse stressed the importance of making early hotel and motel reservations.

Committee chairmen for the 71st Convention include Housing, **Fred Eickhoff**; Reg-

istration, **George Tibbs**; Program and Banquet **Don Petersen**; Veterans Luncheon, **Roy Doherty**; Prizes, **Wayne Eberhard**; Sports, **Welles Eer Nisse**; and Auxiliary Activities, **Mrs. Lucille Eickhoff**.

VETERAN ANDES PHARMACIST DIES

A. J. Danks, 62, veteran Lake Andes pharmacist, died March 14 after a lingering illness.

Danks had owned and operated the Danks Pharmacy since 1923. Survivors include his widow, Hazel; a son, Gerald, now in the Army at San Pedro, California; two sisters, Mrs. H. J. Kugler of Ronan, Mont., and Mrs. Glen Kees of Williston, N. D.

O. G. LIPPERT DIES

Oscar G. Lippert, 53, Humboldt pharmacist, passed away in a Sioux Falls hospital recently.

Born at Neilsville, Wisconsin, he came to Timber Lake with his parents in 1904. He married Elenore Oho, June 6, 1931 at Lake Norden. Mr. Lippert received his degree in pharmacy at South Dakota State College in 1931 and has operated the Humboldt Drug in that town for over 20 years. He was an active participant in community affairs.

EARL R. SERLES DIES

Burial services for **Earl R. Serles**, former Dean of Pharmacy at South Dakota State College, were held at Alexandria, South Dakota, Sunday, March 17. Dr. Serles passed away March 13 at Chicago, Illinois.

Dean Serles, as most people at South Dakota State College called him, was born in Salem, South Dakota, in 1890. He was graduated from Salem High School in 1909 and came to State College, where he was then awarded the degrees of Ph.G. in 1911, B.S. in 1915, and M.S. in 1917. In 1934 he was granted the Ph.D. by the University of Minnesota, and in 1953 South Dakota State College conferred upon him the honorary degree of Doctor of Science.

While attending State College he met Daphne Chapman, who became his wife in 1917. Dean and Mrs. Serles have been both loyal and active alumni of their alma mater. They have also been very active in Masonic organization work.

After discharge from the army in 1918, where he had served in a Medical Unit, Earl Serles became an instructor in pharmacy at State College and ultimately became Dean of the Division of Pharmacy in 1923. In 1940 he resigned to become Dean and Professor of Pharmacy at the University of Illinois. There since 1940 he had supervised the completion of the most modern college of pharmacy in America at a cost of over \$5,500,000. He was one of six University staff members of the president's advisory council,

which formulates major policies of the university relating to education, administration, and finance.

Dean Serles was a member of Gamma Alpha, Rho Chi, Phi Beta Pi, Sigma Xi, the American Legion, many Masonic organizations and many pharmacy, medical, and public health societies. He had been president of A.A.C.P. and of A.Ph.A. and had held offices or membership in over thirty other societies. He was a member of First Congregational Church, Oak Park, Illinois.

C. A. LOCKE GIVES SCHOLARSHIP

An annual pharmacy scholarship of \$108 was donated recently to the Division of Pharmacy, South Dakota State College, Dean **Floyd J. LeBlanc** announced.

To be known as the Alice Locke Scholarship, the grant was made by Charles A. Locke, veteran South Dakota pharmacist, in memory of his wife.

The scholarship will cover tuition and fees for one year and will be given to a sophomore or junior pharmacy student. The award will be made by the faculty of the Division based on scholarship and need.

PHARMASCOOPS

Perriton Drug and Jewelry of Huron is moving to a corner location at 4th and Dakota. A modern display self-service type store has been built for their large line of gift items.

Duane Tupper, Volga, is vacationing in California

with **Ben Olson** of Flandreau serving as relief pharmacist.

Also on the vacation list recently was **Rod Meyer**, pharmacy manager of the Lewis South Gate Drug in Sioux Falls. The Meyer's spent some time in Las Vegas and California.

Bernard Tennyson of the Jones Drug, Custer, had his tonsils removed in March. This was a vacation of another sort. **Dan Evander** of New Castle, Wyoming managed the store.

Mary Ann Kohler, formerly with the Peterson Drug, Rapid City, is now located at Alliance, Nebraska.

Other remodelings include **Milt Swenson**, Swenson's Rexall Drug, Lake Preston, and **Dale Auchampach**, Faulkton Drug of Faulkton, S. D.

Art Garrat, Colman, reports that his son and wife Mildred are doing nicely in Ventura, California. Mildred is teaching chemistry in the high school there.

DR. HOPPE RECEIVES CHILEAN DRUG AWARD

Dr. James O. Hoppe, pharmacologist at the Sterling-Winthrop Research Institute, Rensselaer, N. Y., has been chosen the recipient of the Chilean Iodine Educational Award for 1957.

The award, which includes an honorarium of \$1,000, was presented to Dr. Hoppe in New York at the annual meeting of the American Pharmaceutical Association during the week of April 28. He was cited for long-term research studies into pharmaceutical agents containing iodine, culminating in the

development of the radio-paque drugs Telepaque and Hypaque.

Dr. Hoppe has been associated with the Sterling-Winthrop Research Institute since 1946. He is in charge of a special section of the Institute's Pharmacology Division which has been investigating the biological properties of x-ray contrast agents.

He received a B.S. in pharmacy and M.S. in pharmacology from Montana State University, and a Ph.D. in pharmacology from the University of Maryland. He is a member of the American Pharmaceutical Association, American Society for Pharmacology and Experimental Therapeutics, American Association for the Advancement of Science, New York Academy of Science, and president of the Albany Club of The Society of the Sigma Xi.

SCHERING RELEASES ARTHRITIS FILM

A new 16 mm. color motion picture on the uses of steroids in the treatment of rheumatoid arthritis has been released for showing to professional groups by the research division of Schering Corporation.

The film reviews the chemistry, physiology and clinical application of the new "Meti" steroid hormones in rheumatoid arthritis and other collagen diseases. It presents the most commonly accepted theories of adrenal corticosteroid therapy and reflects the current knowledge of the subject.

The 25 minute film, which



Pharmacists Attending State College Institute

is the fourth in Schering's series on hormone therapy and the endocrines, was produced by the company's Clinical Research Division and Biochemical Research Department. Three leading rheumatologists and endocrinologists cooperated: Dr. Joseph Eidelsberg, Associate Professor of Clinical Medicine at New York University's Post Graduate Medical School and Chief of the Endocrine Clinic at University Hospital, New York, Dr. Abraham Kolodin, Senior Attending in Medicine at Mountainside Hospital, Montclair, N. J. and Dr. Evelyn Merrick, Rheumatologist at the Orange Medical Center, Orange, N. J.

The film is available to medical and allied professional groups on loan without charge. "Meti" Steroids in Rheumatoid Arthritis" and other Schering films may be obtained by writing to The Audio-Visual Department, Schering Corporation, Bloomfield, N. J.

U.S.P. UNVEILS PAINTING

A large oil painting, depicting the founding of the United States Pharmacopeia and the first U.S.P. Convention at Washington D. C., January 1820, was unveiled at the U.S.P. Headquarters Building, 46 Park Avenue, New York, on Wednesday, May 1.

The artist is the well-known Robert Thom, who recently completed the already-famous Parke Davis series of paintings on the history of pharmacy and is now actively engaged on a similar series covering the history of medicine.

An appropriate program was arranged at which Dr. Albert H. Holland, Jr., Medical Director of the Food and Drug Administration, was the principal speaker. A souvenir brochure of the occasion was distributed at the unveiling.



THE USES AND ABUSES OF INTRAMEDULLARY NAILS*

Einer W. Johnson, Jr., M.D.,
Section of Orthopedic Surgery,
Mayo Clinic and Mayo Foundation,†
Rochester, Minnesota

The intramedullary nail used in treatment of acute or old fracture is a relatively recent addition to the orthopedic armamentarium. Perhaps this technic first came to the attention of the lay press when our prisoners of war were returned to this country from German prisoner of war camps, and among them several persons with fractured femurs were found to have been treated by fixation with intramedullary nails.¹⁰ Actually, intramedullary nailing to fix a fracture was tried as early as 1918 by Hey Groves in Britain, and in his book in 1921 he discussed his attempts to fix fractures with intramedullary nails. He was forced to abandon the use of them, however, because of the corrosive action of the metal he used. In 1939, Rush had some success with the use of Steinmann's pins in the medullary canal, but the method was not widely accepted at that time. It remained in disuse until World War II, when the round Küntscher type of nail found favor in Germany and was used extensively for German civilian and military wounded. The shortage of both civilian and military hospital beds, as well as the fear of infection, prompted the

German medical profession to develop the blind nailing technic under fluoroscopic control as advocated by Küntscher. Although this method was not ideal, it did make a virtue of the necessity of relieving the serious shortage of beds. Since World War II, use of the Hanson-Stret nail, the cloverleaf Küntscher nail, the Rush nail, and the Lottes nail has become fairly general; it now is well accepted.

Intramedullary nailing at present is hailed as one of the greatest advances in treatment of fractures, and it has been said, "Given proper indications, intramedullary fixation is a most effective form of treatment for many fractures of the shaft of the femur."¹¹ This statement has been paraphrased by one cynic to read as follows: "This technique, if applied to improperly selected cases, or if inefficiently or unskillfully carried out, offers more possibility of trouble than any other." Both of these quoted statements are true. As will be seen further, intramedullary nailing can be a helpful means of treating acute fractures. But even so, it may afford the surgeon a chastening experience if he gets into trouble with insertion of the nail.

Uses

Fresh Fractures.—Probably the most important use of an intramedullary nail is in

*Read at the meeting of the South Dakota Chapter of the American College of Surgeons, Huron, South Dakota, January 12, 1957.

†The Mayo Foundation, Rochester, Minnesota, is a part of the Graduate School of the University of Minnesota.

fresh fractures, and probably such fixation is employed most frequently in fractures of the mid-shaft of the femur⁷ (fig. 1). It has been



Fig. 1. Fracture through the mid-femoral shaft, an ideal location for use of an intramedullary nail. The fracture has occurred at the narrowest point of the medullary canal, thus making for good fixation by the nail.

said that in the femur a fracture more than 2 inches below the lesser trochanter and more than 7 inches above the adductor tubercle is the ideal situation for intramedullary fixation. Fractures in the mid-shaft of the tibia (fig. 2) are similarly suited for internal fixation by means of an intramedullary nail. Fractures of both bones of the forearm (fig. 3), particularly those in the mid-portion, as well as some Monteggia fractures, if not stable after one or two attempts at closed reduction, are also candidates for intramedullary fixation. In selected cases, fractures of the metacarpal bones can be fixed well by intramedullary Kirschner wires. In my experience, use of intramedullary wires in the

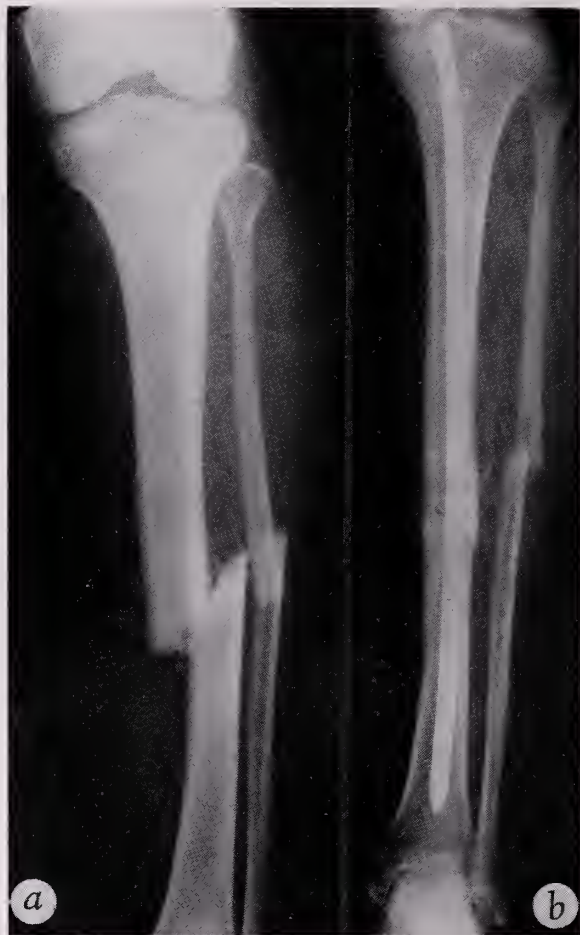


Fig. 2. Fresh fracture. **a.** Through the mid-shafts of the tibia and fibula, a good location for use of an intramedullary nail. **b.** The same fracture in tibia fixed by a Lottes nail.

humerus has not often been particularly rewarding, although it can be a simplifying factor in occasional cases. The same applies to the clavicle. It is wise to state that in repair of these two bones intramedullary fixation is of doubtful and only occasional importance.

Fixation of fresh compound fractures by intramedullary nailing is not recommended. My colleagues and I customarily have carried out a primary débridement and closure of the wound and awaited healing of the compound wound before insertion of the intramedullary nail. This involves a period of about 14 to 16 days in balanced traction, but greatly reduces the risk of infection of the medullary tract.

After Other Surgical Procedures or Non-union.—The second use of intramedullary nails is that for postoperative fixation in the treatment of nonunions and in instances in which arthrodesis or more than one oste-



Fig. 3. a. Anteroposterior view of radius and ulna showing intramedullary fixation by Rush nails. b. Lateral view of the same. These fractures were compound. Primary débridement and closure of the wounds were carried out. Treatment with antibiotics was begun and open reduction and internal fixation of the fractures were performed 3 weeks later, after complete healing of the compounding wounds had taken place.

otomy is employed. Osteotomy frequently is used in cases of osteogenesis imperfecta or other deforming bony lesions. In such instances, intramedullary fixation with a nail can help to stabilize a bone which has been subjected to osteotomy at multiple sites. In the surgical treatment of nonunions of a long bone, particularly the femur, the intramedullary nail gives adequate fixation for application of a graft. Occasionally, in arthrodesis of the shoulder, external fixation may be discarded earlier if an intramedullary nail is used to extend across the glenoid fossa and into the shaft of the humerus. Fixation by intramedullary nailing may be of value also in maintaining postoperative fixation following arthrodesis of the knee.

Pathologic Conditions.—The third large category of use of an intramedullary nail is that for pathologic conditions^{1, 6} (fig. 4a). Some emphasis on this is necessary, since it probably tends to be forgotten in the preoccupation with use of intramedullary nails for acute fractures. The aims of this method of treatment, however, are to prevent long

confinement to bed; to reduce pain by fixing the fracture and holding it well; to allow for earlier ambulation and definitive care, such as roentgenologic treatment; and to prevent extra-osseous damage in certain situations in which renal calculi may form as a consequence of long rest in bed. A basically different, and final, aim of intramedullary nailing would be to prevent pathologic fracture (fig. 4b).

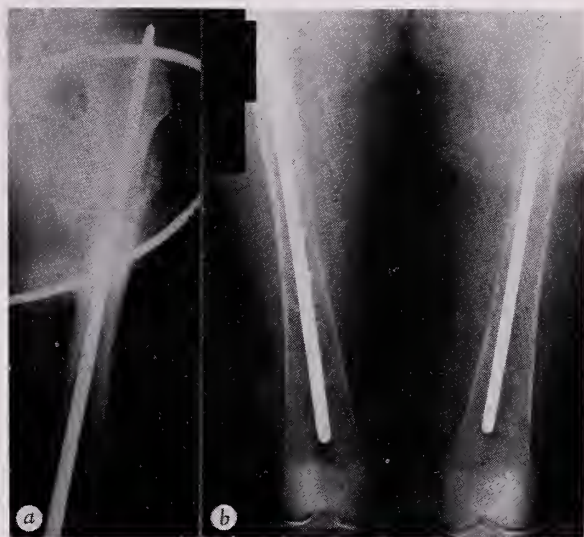


Fig. 4. a. Pathologic fracture of the upper part of femur. At open reduction biopsy revealed metastatic adenocarcinoma from the breast. Cancellous bone from the ilium was packed about the fracture after curettage of the malignant tissue and internal fixation by intramedullary nail. Radiation therapy was given postoperatively. Solid union was obtained. b. Bilateral involvement of the femoral shafts in Gaucher's disease, with intramedullary nailing done to prevent pathologic fracture. Pathologic fracture of the humerus had occurred earlier.

This last use for intramedullary nailing is most often indicated in weight-bearing bones, almost always the femur. Here may be anticipated metastatic lesions from the kidney, the breast, the prostate, the thyroid, and the gastrointestinal tract; and here may be seen inherent bony lesions from such generalized diseases as hyperparathyroidism, Paget's disease, and osteogenesis imperfecta. It has been said that the risk of surgical intervention and the risk of tumor spread probably are increased in patients who already have metastasis from malignant disease. Properly, the increased risk of surgical treatment should be only a minor deterring factor, for some physicians believe that these patients tolerate surgical operation as well as many

others with less serious disease. As for the risk of mechanical spread of the tumors — on theoretic grounds, at least, this can appear important; but from a practical viewpoint spread of the tumor has not occurred when the nail has been driven through metastatic tissue.

Complications

Due to Open Reduction.—Certain complications are attendant on any open reduction of any fracture. Lottes and Key listed 13 of these as follows: (1) surgical shock; (2) death; (3) failure of reduction; (4) fever; (5) hemorrhage; (6) infection; (7) thrombophlebitis, phlebothrombosis, pulmonary embolism; (8) fat embolism; (9) deformity and malunion; (10) distraction at the site of fracture; (11) delayed union and nonunion; (12) excessive formation of callus, and (13) stiffness of joints.

Some of these need special attention. Certainly, surgical shock is related to loss of blood, and in open reduction of fractures of the femur it is wise to have at least 1 and probably 2 pints of blood available as a supportive measure. The incidence of infection in large series of fractures treated by open reduction has been about 3 per cent, but it is noteworthy that the incidence of infection after open reduction of the femur has been about 6 per cent in most large series. Thrombophlebitis, phlebothrombosis, pulmonary embolism, and fat embolism are problems which do not concern me in this paper. It has been thought in the past that fat emboli would be increased by the driving of the nail down the medullary cavity,⁸ but this has not proved true in large series. Deformity and malunion at the site of fracture may occur, and often distraction can occur because of impaction of the nail in the distal fragment. Intramedullary nailing has not been accompanied with excessive formation of callus; stiffness of joints, far from being a complication, is lessened by intramedullary nailing because the procedure has tended to promote early ambulation.

Due to Nailing.—Other complications are directly related to the intramedullary nailing. Lottes and Key listed 10 such complications as follows: (1) improper length or diameter of nail; (2) cutting out of cortex or splitting by nail; (3) breaking of the guide pin; (4) additional comminution; (5) splitting of the

shaft of the femur; (6) pain and swelling of the knee; (7) bending or breaking of the nail; (8) bursa over the end of the nail; (9) pain in the hip, and (10) migration of the nail. The first five of these have to do with proper measurement of the length and breadth of the nail (fig. 5a, b, and c). All five probably



Fig. 5. Difficulties due to improper measurement of nail. **a.** The intramedullary nail, too long, was driven into the knee joint. Later it was withdrawn and a shorter nail used. Aside from transitory postoperative effusion of the knee no untoward effect was noted. Accurate preoperative measurement of the nail, and close roentgenologic watch on its course at the time of operation would have prevented this. **b.** The intramedullary nail was too short, and at operation the driver inadvertently entered the trochanter. Both were extracted, a longer nail was substituted, and satisfactory fixation and result were obtained. **c.** The intramedullary nail, too large, split the cortex of the distal fragment. Repair of the split fragment was accomplished by use of a Parham band, after which reaming was done and the nail was re-inserted. Reaming of the distal fragment would have prevented this.

could be obviated if the intramedullary canal were bored first to fit the nail intended for use. Pain and swelling of the knee are frequent postoperative complications following intramedullary fixation of the femur, and have been thought due to one or more of the following causes: (1) injury to the knee at the time of fracture; (2) strain on the ligaments of the knee at the time of reduction; and (3) presence of the nail in the distal part of the femur beneath the suprapatellar pouch of the knee joint. Bending or breaking of the nail can occur with unusual activity or trauma and usually necessitates removal and replacement of the nail. Pain in the hip and a bursa over the end of the nail can be obviated by removal of the nail. Migration of the nail has been a factor in some cases; it usually can be prevented by fixation of the upper end of the nail with a transfixing screw or plate. Other complications that have been reported

in intramedullary nailing of the femur are severance of the femoral artery and failure to engage the distal fragment at all; in intramedullary fixation of the humerus, the radial nerve sometimes has been injured.

Measures to Prevent Complications

First to be considered among customary safeguards to prevent these complications are the usual supportive and operative measures, which consist of transfusions of blood, adequate control of anesthesia, a full complement of instruments, and sufficient assistance at the time of operation. Transfusion of blood for patients undergoing intramedullary nailing, and particularly those with femoral fractures, makes an important contribution to the operative course, as does adequate control of anesthesia during the procedure. The importance of a full complement of instruments for the particular nail being used cannot be stressed enough. Probably one of the most important instruments to be included is a hack saw with not one, but several, blades available; and a vise, a couple of metal files, and other instruments for use in molding the metal nail are highly desirable. Certainly a complete set of reamers, as well as of nails, should be available. Only one style of nail should be stocked, and this should be stocked in only one or two diameters; 9 and 11 mm. have been suggested. Lengths varying by 2 cm. from 30 to 42 cm. should be stocked to make for a minimum of confusion. The surgeon should familiarize himself with these instruments before using them in his first case. Key has emphasized that this type of fracture fixation is not adapted to the novice or to one who uses such equipment only once or twice a year.

Measurements.—Another safeguard for prevention of complications has already been mentioned. It consists of the proper preoperative measurement of the bone. Many of the complications previously listed are due to inadequate preoperative knowledge of the length and width of nail necessary. It has been our policy to obtain a scanogram of the normal femur on which we are able to measure the width of the medullary canal, as well as the length of the femur, and thereby make an accurate determination as to the size of nail needed. A rough estimate of the proper length of nail may be made from a measurement extending from the top of the tro-

chanter to the joint line on the lateral aspect of the knee, but if a surgeon uses this means, he should then check the course of the nail roentgenologically during the operation.

Roentgenologic Assistance.—The third type of safeguard is adequate roentgenologic control. Certainly one should be prepared to get roentgenograms of the upper part of the femur, as well as of the region of the knee, to be sure that the progress of the nail is satisfactory and that comminution of the fragments is not taking place. Postoperative roentgenograms are satisfactory for checking, but the surgeon should not rely on surgical judgment to depict the course or progress of the nail. Adequate roentgenologic control at the time of operation will frequently prevent considerable comminution or driving of the nail into the knee.

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The History of the South Dakota State Medical Association

(Continued from May)

Clark J. Pahlas
Pierre, South Dakota

CHAPTER III

STATE AND NATIONAL LEGISLATION

Although the medical profession in South Dakota was protected by territorial law, it was not until the appearance of the State Medical Association in 1882 that legislation aimed at professionalism was stressed.

It has been shown how the State Medical Association worked for the creation of the State Board of Health in 1885 and the State Board of Medical Examiners in 1903. It was not until the third decade of the twentieth century, however, that real progress in state legislation began. The 1920's marked the real beginning of the fight in South Dakota between the professionals and the nonprofessionals practicing the healing arts. There ensued a legislative struggle headed by the association against the quacks and would-be-doctors; this finally culminated in the passage of the Basic Science Law in 1939.

Opposed as it was to the encouragement or advancement of any nonprofessional medical treatment, the association gave a sideward glance to such offspring professions as osteopathy and chiropractic. The fact that these groups received legal recognition did not discourage the association in its attempts to curb the extent of their practice. This was the case in 1924 and 1925, when the association fought an attempt on the part of the chiropractors to amend the law regulating chiropractic treatment so as to give them the power to do major surgery. This bill was passed in the Senate, but was defeated in the House.¹

At the same time, "... a bill exempting hospitals from taxation provided they would permit all doctors and physicians in good

standing to treat patients in the hospitals," was also defeated. Inasmuch as osteopaths and chiropractors were legally licensed by the state, this bill would have allowed them to treat patients in the hospitals.²

Another group of non-medical practitioners came under the criticism of the association in 1925. It was in the interest of professionalism that the association successfully fought for a revision of the State Medical Law, "regulating Electric Baths, Sections 7731, 7732, 7733, Revised Code of 1919."³ A person licensed under these sections could, without scientific knowledge of diagnosis, give any type of electrical treatment.

Such an applicant before the Board of Medical Examiners, when asked if he had had training in medicine or physical diagnosis, said that he had not, and did not make a diagnosis, but treated individuals for the disease they said they had. This is an absurd condition, and measures should be taken adequately to control these operators and protect the uninformed laity, if possible.⁴

The State Medical Association recognized "... electricity as applied to the human body as a justifiable therapeutic agent." However it wanted to go on record as saying this type of treatment must be given under the direct supervision of a physician. Therefore it was not the treatment that was unorthodox or of questionable medical justification but the application of the treatment by unqualified individuals.⁵

The real threat of these quacks and irregulars to the public was that if they were

2. *Ibid.*, p. 439.

3. *Journal Lancet*, XLVI (September 1, 1926), 395.

4. *Loc. cit.*

5. *Journal Lancet*, XLVI (September 1, 1926), 395.

1. *Journal Lancet*, XLV (September 15, 1925), 438.

accepted as doctors, they might take on medical responsibilities beyond their skill to effect a cure. To guard against such duplicity the association urged its members to use the title of M.D. rather than that of Dr.

These hazards of quackery in South Dakota, concealed from the general public, gave an air of unprofessionalism to the practice of medicine which no self-respecting medical doctor could endure or condone. The fight waged against the cults which were continually invading the professional realms of medicine was led by the State Medical Association. The weapon forged by the association was a Basic Science Law aimed at insuring professional qualifications along basic science lines among physicians preparing for state medical certification. The purpose of the Basic Science Bill was to eliminate these cults, and more especially the osteopaths and chiropractors, from practicing in the state.⁶

BASIC SCIENCE

It was felt that elimination of undesirables could best be achieved by the creation of a basic science board with the duty of examining all people who desired a license to practice the healing arts. This educational barrier, it was supposed, would keep out the quacks and irregulars.⁷

The association first formulated its plans for basic science legislation at its annual session in 1928. A special committee made up of Doctors N. K. Hopkins, J. F. D. Cook, and T. F. Riggs was appointed to draft the measure, with anticipation of presenting the bill to the next legislature.⁸ Immediate steps were taken by the new committee, and a bill was drawn which avoided being "antagonistic to any medical legislation already in force," and which was "minus any loopholes through

6. President J. R. Stewart in 1937 had this to say about the cults, "A real quack becomes a cultist whenever he is able to attract to himself a sufficient number of followers to form an organization for the purpose of teaching the propaganda that he wishes to spread abroad."
7. The term **basic science** should be understood and construed to mean and include anatomy, physiology, bacteriology, pathology, and chemistry so far as they relate to the practice of the "healing arts."
8. *Journal Lancet*, XLIX (July 15, 1929), 313. It is of interest to note that the association took steps to educate the legislators by sending each member of the Senate and the House a subscription of *Hygeia*, the official voice of the American Medical Association.

which slippery eels might pass."⁹

The association's Legislative Committee went to Pierre in 1929 to see that the bill was "properly launched in effective channels." At Pierre it was found that practically all the medical districts comprising the State Medical Association had instructed their legislators to favor the passage of the Basic Science Law. Only one of the medical districts, the Black Hills District, opposed the measure, and had instructed its legislators to vote against the bill. The apparent reason for this opposition was that the bill "... was merely another piece of legislation which was unnecessary in that it only created another board of medical examiners in a field already amply provided for."¹⁰ Difficulty came from the fact that the most influential members of the legislature were those men representing the counties in which this opposing district was located. These legislators were pledged to opposition, but, after being enlightened upon the measure by the association's Legislative Committee, they were heartily in accord with it and promised to support it if released from their commitments to their constituents.¹¹

With the above encouragement, the president of the association made a special trip to the Black Hills in hopes of reaching an "amicable and co-operative understanding" with his fellow practitioners. This agreement, however, was not forthcoming. Therefore, because of the influential opposition pledged in the legislature, the association's Legislative Committee felt it wise to withdraw the Basic Science Bill. Thus, it was disunity within the medical profession itself that defeated the first attempt to pass basic science legislation.

The lack of professional co-operation on the part of the Black Hills District received considerable criticism from the State Medical Association. The members of the association looked upon the members of the Black Hills District as "conscientious objectors." One of the members of the Board of Councilors had this to say:

The people are ready for the Basic Science Law. Why can't those neophytes from across the river express their willing-

9. *Ibid.*, p. 315.

10. *Journal Lancet*, XLIX (July 15, 1929), 315.

11. *Loc. cit.*

ness to play ball? For them to sit over there and nurse their grouch and say nothing about it, that is an attitude with which I have no patience. I feel like suggesting that they be ostracized from the Association until they do come around and express their opinions.¹²

However, there was other disunity within the association besides this opposition from the Black Hills Medical District. There was divided opinion as to the make-up of the proposed Basic Science Board of Examiners. If South Dakota followed the example of other states, such as Minnesota, the board would represent the medical doctors, the osteopaths, and the chiropractors. There were, however, medical doctors who felt there should be no compromise with the osteopaths and chiropractors. One of the leaders in this opinion was Dr. Hohf of Yankton. On this matter he stated:

The osteopaths and the chiropractors and every damn cult wants recognition, and here is one on his feet who will not recognize them. I will fight them to the last ditch if it is necessary. I shall not vote for anything that puts me on a parity with the chiropractor. Anyway, is the influence of 350 men who comprise the organized medical forces of the state not equal to this little handful of chiropractors and osteopaths?¹³

Of another opinion was a group of members who believed the only way of passing the Basic Science Bill was to compromise with the osteopaths and chiropractors, giving them recognition on the Basic Science Board of Examiners. It was felt this would appease these two groups and at the same time allow the osteopath and chiropractor on the board to serve as a check in halting their own competition from coming into the state.

Although there was this division as to the make-up of the Basic Science Board, one matter in which all councilors were in agreement was the need for establishing a better understanding between the association and

the state legislators. It was the general opinion of the association members that the legislators did not understand the position nor the intentions of the association. Dr. McLaurin of Pierre stated, "I have lived through six legislature sessions in Pierre. They think that we are the richest bunch of crooks from South Dakota." Added to this was the opinion of Dr. A. E. Bostrom of the Eleventh District:

Do you wonder they don't like to get behind us? They have an idea that the only thing we ever want to have a bill passed for is that we will draft [cheat] the people a little more. Sometimes I think there is some truth in it. We have got to stop this talk of passing laws for the benefit of the dear public. We never passed one damn law for the benefit of the public or got behind one. Every law we ever tried to pass was for our own benefit. It is true they indirectly benefit the public.¹⁴

Faced with this problem of establishing rapport between itself and the legislature, the association went ahead and formulated another Basic Science Bill to be submitted at the next legislature.

Between the annual meeting of 1932 and the introduction of this bill in February, 1933, the association generated within its own ranks a new enthusiasm for basic science legislation. Special meetings of the Board of Councilors were held on December 6 and 22, 1932; January 18, 1933; and February 3, 1933, all dealing with the passage of the Basic Science Bill.¹⁵

However on the day when the bill came to a vote, the **Journal of the House** carried the notation, "Mr. Kleinsasser moved that further action on House Bill No. 2, [Basic Sciences Bill] be indefinitely postponed, which motion prevailed. Bill defeated."¹⁶

Thus, once again the hopes and efforts of the State Medical Association came to naught. The opposition of the quacks proved too strong, and the second attempt to pass basic science legislation failed. The Hon. H. L. Bicknell, acting as legal council for the association made the following comments on the

12. **Proceedings of the Board of Councilors of the South Dakota State Medical Association, Annual Session of 1930**, Unpublished manuscript on file in the office of Dr. R. G. Mayer of Aberdeen, South Dakota.

13. *Ibid.* The chiropractors had an estimated membership in the state in 130 of 90, and the osteopaths were estimated at about 38 or 40.

14. **Proceedings of the Board of Councilors of the South Dakota State Medical Association, Annual Session of 1930**.

15. **Journal Lancet**, LIII (July 15, 1933), 365, 366.

16. *Ibid.*, p. 366.

failure of the Basic Science Bill.

For one thing, they [the State Medical Association] did not have any doctors upon whom they could rely in either house of the legislature. The chiropractors had Dr. Kleinsasser . . . He was vitally interested in opposing the bill and watched every corner. It is my recommendation that before we bring this matter forward again the Association have several doctors stand for the legislature, putting one on the Republican and one on the Democratic tickets in several counties, thereby insuring that your profession will be adequately represented.¹⁷

If there was one lesson learned from this second defeat of the Basic Science Bill, it was that medicine and politics had to be mixed if the desired ends were to be achieved. The professional opinions of the State Medical Association would continue to mean little as long as its members were politically weaker than the osteopaths and the chiropractors.

With a goal of creating "medical politicians" the association attempted to interest its members in politics during the next few years. When the Basic Science Bill was again revived in 1938, the association was prepared for a maximum effort in getting the bill passed in the 1939 session of the state legislature. Mr. Karl Goldsmith was hired by the association as its legal adviser and as chairman of the medical lobby. He was given full authority to call on members of the State Medical Association at any time for assistance. With this legal help the association hoped to receive favorable action on the bill.

The men representing the chiropractors and osteopaths were too alert, however, to allow a bill to pass that would deny them equal right on the Basic Science Board of Examiners. It was therefore stipulated in the bill that the governor's appointments to the five-man board,

Shall consist of one Doctor of Medicine, one Doctor of Osteopathy, one Doctor of Chiropractic, hereinafter referred to as professional members, all of whom are residents of this state licensed to practice their respective professions therein, and two resi-

dents of this state who are full time professors or associate or assistant professors teaching the subjects of the basic sciences in any university or college in this state accredited by the North Central Association of Secondary Schools and Colleges, hereinafter referred to as lay members, who are not actively engaged in the practice of the healing arts, or any branch thereof, nor hold a degree in any of the healing arts.¹⁸

With these provisions finally agreed upon the bill was passed and became law July 1, 1939.

The first Basic Science Board appointed by the governor met for its initial meeting during the latter part of September, 1939, in Aberdeen. The members present and officers of the board were:¹⁹

Dr. J. D. Alway, M.D.—President
Dr. F. E. Burkholder, D.O.—Vice President
Dr. G. M. Evans, Ph.D.—Secretary
Dr. M. L. Severance, D.C.
Dr. W. H. Waller, Ph.D.

In spite of the fact that there had been considerable conflict between the medical doctors on one side and the doctors of osteopathy and chiropractic on the other, mutual co-operation was and has been maintained among the members of the Basic Science Board. This ability to maintain mutual co-operation has been attributed to the ". . . firm attitude of Dr. Alway at that original meeting in Aberdeen, indicating that he would stand for no unfairness, partiality, or prejudicial action on the part of the Board."²⁰

With the passage of the Basic Science Law of 1939, it became necessary for all people in the state practicing the healing arts to obtain a basic science certificate. This certificate could be acquired only upon the successful completion of a comprehensive examination written under the direction of the Basic Science Board of Examiners.

The chief difficulty faced by the Basic Science Board between 1939 and 1943 was that of getting the local State's attorneys to

(Continued on Page 222)

17. *Ibid.*, p. 371. Taken from "Mr. Bicknell's Report Concerning Suggestions for Future Attempts at Passing Basic Science Legislation."

18. *Session Laws of South Dakota* (1939), Chap. 104, p. 130.

19. Dr. Gregg M. Evans, Letter to auditor, April 10, 1956.

20. *Loc. cit.*



THE TRAINED OFFICE GIRL*

The key to improved efficiency in a physician's office may be in the hands of his medical office personnel, a nationwide survey reveals.

Are medical secretaries and assistants properly trained for their jobs? Does the physician-employer properly delegate duties to office personnel to make best use of individual skills and training? Are there tasks which the physician should assign to an aide in order to give him more time to see patients?

These are some of the questions which are answered in a study conducted last year to determine the ideal knowledges, skills and personal qualities of medical secretaries. Conclusions were based on mail-questionnaire information supplied by approximately 500 top-notch medical secretaries and on personal interviews with physicians and business educators. The study was conducted by Harold Mickelson, Northeast Missouri State Teachers College, in cooperation with the American Medical Association. Mickelson completed the study in connection with his work toward a Doctor of Education degree at Indiana University.

Mickelson analyzed those activities performed in physicians' offices, classifying them into three categories: (1) highly technical medical activities which under normal conditions only a physician can perform; (2) semitechnical medical activities which may be performed satisfactorily by medical office

personnel under the supervision of the physician, and (3) business office activities of a routine or management nature which are ideally performed by the secretary or aide.

Mickelson concludes that "physicians are not making maximum use of their extensive training when they unnecessarily perform semitechnical medical and business activities." To help physicians determine what responsibilities can be properly delegated to office personnel, Mickelson is currently preparing a system for assigning duties which will be furnished by AMA to medical societies.

A highly competent secretary, he believes, can relieve a physician of performance of all or nearly all business — office and semitechnical medical activities connected with his practice. The physician, however, still remains responsible for supervision of these activities.

Physicians interviewed agree with Mickelson. One doctor expressed the opinion that "there is almost no ceiling to the responsibility that an outstanding secretary can take over for a physician." Another said: "There is no practical way to practice medicine today without a medical secretary." The consensus was that it is penny-wise and pound-foolish to employ an incompetent aide.

Where can girls get proper medical secretarial training? What kind of schools should offer training to medical aides? Mickelson believes training should be at the post-high-school level and that a four-year college-degree training program is preferable to a shorter course.

*Prepared by the Public Relations Department of the American Medical Association.

According to Mickelson, only schools with strong business training and strong science departments can offer the kinds of courses and the quality of training that is desirable. His recommendations for course content include development of high-level competency in all generally accepted secretarial skills, business office activities peculiar to the medical office, and all semitechnical activities ordinarily performed by physicians' employees. Semitechnical activities are those related to the examination or treatment of patients, weighing patients, taking temperatures and blood pressures, assisting with minor office surgery or treatment procedures, giving certain types of injections, sterilizing instruments, and conducting some laboratory tests, such as urinalysis and simple blood tests.

Students also must develop certain personal qualities important to their particular job success. These personal qualities were listed by physicians in interviews and are considered necessary in the good medical secretary or aide. They include: pleasantness, neatness, ability to get along with people, ability to use the telephone effectively, intelligence, politeness, ability to keep secrets, interest in and feeling for people, initiative, honesty, enthusiasm, interest in medical work, loyalty, cooperation, conservation, pleasant voice, self-confidence, ability to make decisions, ability to instill confidence, willingness to continue to learn on the job, dependability, patience, aggressiveness (must not be shy), accuracy, memory, maturity, and a sense of humor.

On the basis of the survey, a number of steps which medical associations and medical secretary-assistants groups can take to help provide a greater force of better-trained aides in the future are suggested:

1. Encourage schools with the necessary personnel and facilities to offer high-quality medical secretarial training.
2. Recruit high school graduates for high-quality medical secretarial training.
3. Organize or assist in organizing refresher courses in medical office administration for the employed medical secretary and assistant.
4. Persuade individuals currently employed as medical secretaries to increase their effectiveness on their jobs through additional training in school and/or on the job.

5. Point out to physicians the importance of employing well-qualified medical secretaries and renumeraling them adequately.

April 15, 1957

MEMO TO: State and County Executive Secretaries, State Secretaries, State PR Directors and State and County Journal and Bulletin Editors.

FROM: Leo E. Brown
Director of Public Relations

The girl who works in a physician's office is a key figure in medical public relations and over-all office efficiency. How can she be properly trained for her job?

Physicians, educators and girls employed by doctors were surveyed last year to find the answer to this question. A report of that study, entitled "Ideal Knowledges, Skills and Personal Qualities of Medical Secretaries," is attached. It was conducted by Harold Mickelson of Northeast Missouri State Teachers College in cooperation with the American Medical Association.

The survey unearthed some significant information about type of training medical office personnel should have, methods for most efficiently delegating office duties, and systems for screening potential medical secretaries on the basis of personal qualities.

How can you put the information contained in this study to practical use to assure a supply of well-trained, high-calibre medical secretaries and assistants in the future? Here are some suggestions:

Schools — Bring survey results to the attention of local junior colleges or business schools training medical office personnel. You may wish to get in touch with schools personally to suggest expansion or revamping of present courses in light of survey findings. In places where no training programs are offered by schools some medical societies have taken the initiative and cooperatively developed courses with educators. Your society may wish to do the same thing.

"Postgraduate" courses for doctors' aides — Encourage women currently employed in medical offices to increase their job efficiency through additional school training or through short "refresher"

(Continued on Page 222)

MEDICAL LIBRARY BOOKSHELF



ALBERT SCHWEITZER

Dr. Marcus Bach, Professor in the School of Religion at the University of Iowa and guest speaker at the Medical School annual dinner, described a trip which he took to Lambarene in French Equatorial Africa and his impressions of Dr. Albert Schweitzer gained from spending several days as a member of his household. Like many others he was struck by Dr. Schweitzer's humanitarianism; his love of all living creatures including animals; his patience and understanding of the natives; his musical talents, particularly his interpretations of the compositions of Bach, and for his practice of medicine in this remote part of the world.

In 1947 a relief administrator and a book publisher flew across the Atlantic over the equator to the Belgium Congo, travelled a week by train and finally by dugout landed in Lambarene and spent a memorable week taking pictures and observing Dr. Schweitzer and his staff caring for the sick natives and going about their daily tasks. An account of their visit is found in **The Africa of Albert Schweitzer** by Charles R. Joy and Melvin Arnold, Harper, 1948. The book is profusely illustrated and is an account of "a rare personality, quietly engaged upon a humble but significant task, and supported by a staff filled with the greatness of his spirit."

An interesting description is given of the Hospital which originated from an old hen house with no windows and holes in the roof, making it necessary to wear tropical helmets, even indoors. In 1926 through a grant of land 3 miles upstream, a new site was chosen and against frightful handicaps a new hospital was built with Dr. Schweitzer supervising the construction and also doing much of the manual labor. When finished one native commented "This is a good hut Doctor, this is a

good hut" The windows and doors of the buildings have heavy wooden bars because the forest is alive with gorillas, elephants, panthers and other native animals. In recent years more buildings have been added thru donations. The Necklace Building was given by an English woman who sold her necklace to pay for it; the Emmy Hof Building by an organist who gave concerts to raise the money. Dr. Schweitzer, himself raised money for the original building through concerts, lectures and the sale of his book.

In 1955 **The World of Albert Schweitzer; a Book of Photographs** by Erica Anderson was published by Harpers. One picture shows "Hospital Street" with the natives waiting patiently for consultation and treatment. Many come up the Ogowe River in dug out canoes landing close to the hospital buildings.

According to the information given in this book leprosy, the main disease is treated in segregated buildings. This new leper settlement was made possible by Nobel Prize money and accomodates more than 300 patients. Sulfone preparations; Propin and Diasone, developed by American chemists are arresting in a remarkable way this terrible scourge and giving hope to many. Dysentery, strangulated hernia and elephantiasis as well as malaria are treated at the hospital. Sleeping sickness patients are now treated under government supervision in a near by village.

A considerable amount of obstetrics work is done in the hospital. In an article by Dr. Schweitzer entitled "Medicine in the Jungle" in the **J.A.M.A.** v. 156, 1954 p. 1547, he explains how he resisted the old women of the tribe who traditionally practiced their dangerous arts and who delivered all of the babies. Each baby born in the Hospital was dressed up in a pretty little shirt and bonnet which the

(Continued on Page 222)

P R E S I D E N T ' S P A G E



Dear members:

I wish to express my deep appreciation for the honor you have bestowed upon me in making me President of your Association.

I have practiced in South Dakota for twenty five years. I hope that permits me to reminisce to a limited degree. Having come to South Dakota in the depths of our great depression, I have seen many changes in the medical picture, both in the acceptance of the physician by the community and the improvement of his armamentarium for giving service to the community. South Dakota gave me the opportunity to work hard when I came here as a young physician. Under the private enterprise system, which I am deeply convinced is the system under which our nation can survive; you young physicians of the State are still given that opportunity. That is all you need if you take advantage of that opportunity. You need to have no fear of security for your family as you grow older and need that security.

South Dakota has been good to me and I am deeply grateful to all the people of our great State.

M. M. Morrissey, M.D.

Pierre, South Dakota



BLUE SHIELD AND THE MEDICAL SOCIETY

Every doctor has a personal responsibility for the success of his Blue Shield Plan, and a direct opportunity to take part in its control. For the first, basic requisite of any nonprofit prepayment plan that wants to use the name and symbol "Blue Shield," is that the plan be formally and continuously approved by the state and county medical societies in its area of operation.

Another requirement, no less basic, is that a Blue Shield Plan's medical policies and schedules of payment be determined by physicians.

Blue Shield is in fact our own chosen mechanism for making our services more readily available, through prepayment, to our patients.

As such, one would expect the relations between all Blue Shield Plans and their sponsoring medical societies to be as intimate and understanding as between the members of any well run family.

A recent survey conducted jointly by the Public Relations Department of A.M.A. and the Professional Relations staff of Blue Shield Medical Care Plans indicates that relationships between the Plans and their local medical societies in general are excellent, and they have improved most notably in the last few years.

Similar questionnaires sent simultaneously to the Plans and medical societies brought prompt responses from 75% of the Plans and 78% of the societies. Of these respondents, 94% of the Plans and 89% of the medical societies reported good or excellent relations with one another. The interesting fact that in 3 cases the Plans thought their relations with the medical society were excellent while the society reported them to be poor, and in three other cases the contrasting

opinions were reversed, only proves that we are dealing with people.

When this questionnaire probed a little deeper into the specific character and methods of liaison, however, it revealed some sizeable areas of weakness and some attractive opportunities for improvement.

For example, only 51% of the responding Plans and 58% of the medical societies reported that they maintain "a specific liaison committee" between them. That some of these committees have not exactly rendered conspicuous service is suggested by the fact that in six cases the Plan and the medical society disagreed as to the very existence of a liaison committee between them. As might be expected, there was a very strong correlation between the areas where liaison committees are operating and the areas where the mutual relations are of the best.

Other specific questions related to jointly sponsored meetings for doctors' office assistants; the inclusion of Blue Shield information in the medical society's orientation program for new members; the setting up of cooperative mechanisms for the use of medical society mediation committees to handle patient complaints; and jointly sponsored indoctrination programs for medical students, interns and residents. In each of these areas of potential cooperation, a majority or a very sizable minority of the respondents reported no action as yet.

If the American doctor needs Blue Shield, it is equally true — if not more so — that Blue Shield needs the American doctor. Without his guidance, Blue Shield might become something quite different from what the profession wants it to be. Without the doctor's support and active participation, there would not even be a Blue Shield.

THE MONTH IN WASHINGTON

Again the Jenkins-Keogh plan is up for consideration in Congress. While there is no assurance it will be passed, or even get out of the House Ways and Means Committee, many sponsors of the legislation this year are united in one organization and are making themselves felt on Capitol Hill.

Briefly, this bill would allow any self-employed person to put a limited portion of his income into a retirement fund without paying income taxes on the money. Taxes would be paid when the money was received as pension or retirement.

Sponsors of the Jenkins-Keogh plan point out that it very definitely is not legislation to give a special tax advantage to one group of people. For one thing, every self-employed person would be eligible, from farmers to doctors and from opera singers to architects. For another, corporations since 1942 have been allowed to put money into retirement funds for their employees without payment of federal taxes on the money; the self-employed merely want the same consideration.

At various times the American Medical Association has led in the campaign for enactment of legislation of this type. Two years ago the House Ways and Means Committee voted to report it out, as part of a broader tax bill, but the committee never actually got around to sending the combined bill to the House floor.

Now the lead is being taken by a newly-formed American Thrift Assembly, or officially the American Thrift Assembly for Ten Million Self-Employed. In addition to the AMA, the new group has the support of American Dental Association, American Bar Association, and a score or more of other national organizations that represent the self-employed.

After the Congressional session was well under way, the ATA surveyed the political-legislative climate and found it favorable for Jenkins-Keogh. Then in early May the assembly asked its constituent associations to go to work. They were urged to have all members contact the House Ways and Means Committee with requests that the Jenkins-Keogh bill be reported favorably to the House floor. Assembly strategists are confident that

if the committee hears from enough of the people who would be affected, it will approve the bill before adjournment. Then, if there isn't time for House action this year, that step can come next year.

Economy has been the main obstacle in the path of Jenkins-Keogh — the fear on the part of the Treasury Department that passage of the bill would mean a serious loss of income tax revenue. However, the Treasury has never denied that the bill is justified to equalize tax status for the self-employed in relation to corporation employees.

Answering the economy argument, the Assembly makes two points:

First, the set-aside funds, invested in the country's economy, would stimulate business and develop far more in new income tax payments than it would cost.

Second, because the self-employed who retain their health rarely retire at any arbitrary age, many of them in the years past 65 would remain in a tax bracket not significantly lower than when they paid into the retirement fund.

PHYSICIANS AND PSYCHIATRISTS FOR CALIFORNIA

State hospitals, correctional facilities and veterans home. No written exam required. Three salary groups:

\$10,860 to \$12,000; \$11,400 to \$12,600;
\$12,600 to \$13,800.

Increases being considered effective July. U. S. citizenship and possession of, or eligibility for California license required.

Write:

Medical Recruitment Unit, Box A, State Personnel Board, 801 Capitol Ave., Sacramento, California.

ATTENTION

Available for locum tenens July 1 for a period of seven to eight weeks general practitioner now finishing internship and scheduled to go into the Air Force late in August.

South Dakota University and Southern Calif. graduate.

Write South Dakota Journal of Medicine for name and address if you are interested.

S.D.S.M.A. HISTORY—

(Continued from Page 215)

co-operate in prosecuting the quacks.²¹ This difficulty arose out of the indefiniteness of the Basic Science Law concerning who would be exempt from taking examinations. Many of the quacks throughout the state insisted they were out of the jurisdiction of the board because they were not practicing the healing arts. To rectify this, Senate Bill 129 was drawn in 1943, amending the Basic Science Law. Under the amendment only those people would be exempt whose treatment did not "... infringe, invade, encroach or intrude upon, or simulate the therapy of those required by the act to obtain a Basic Science Certificate."²²

The passage of the Basic Science Law, much to the credit of the State Medical Association, brought a new professional quality to the practice of medicine in South Dakota. Although total control of the cults was not achieved, it did establish the legal machinery necessary to rid the state of these great pretenders.

(To be continued in July)

21. *Journal Lancet*, LXI (July, 1941), 269. Dr. Gregg M. Evans in his letter of April 10, 1956 (see previous citation) refers to this problem as still existing in the state. The particular attorney referred to "... is too politically minded and feels it would cost him votes if he prosecuted any of the dear men who go forth in healing the sick."
22. *Journal Lancet*, LXIII (July, 1943), 202.

MEDICAL ASSISTANTS—

(Continued from Page 217)

courses of the type sponsored by many medical societies. Such medical society-sponsored courses should be developed to conform fairly closely to survey recommendations for course content.

Medical assistants organizations — Assist medical assistants groups in your area to carry on educational members' job competency.

Recruitment — Make use of survey findings in recruitment efforts to encourage qualified young women to enter the medical secretarial field.

Physician education — Tell physician-members about survey results to convince more physicians of the importance of employing highly competent aides. It

is penny-wise and pound-foolish to employ incompetent help.

To help you call attention to the study in your society publication a brief story reporting on its findings is attached. If you'd like additional copies of the survey, we'll be happy to supply them.

MEDICAL BOOKSHELF—

(Continued from Page 218)

mother was permitted to take home. Against this attraction the old women could not prevail and now most babies are born in the hospital.

Recently a film was made by Jerome Hill and his photographer associate Erica Anderson and narrated by Frederic March and Burgess Meredith. Dr. Schweitzer agreed to the making of the film provided that it not be shown in his life time. After seeing it and hearing some playbacks of his performance on the organ in the church of his native Gunsbach he decided it could be released. The film has been praised, not only for its colorful scenes of Alsatia hills and tidy villages and exotic scenes of Africa, but more particularly for Schweitzer's face with his alive eyes, massed hair, ill kept mustache and ruddy tropical complexion. He takes you to his home in France where he plays a Bach prelude on an organ of his own designing; with him you journey to Africa up the Ogowe River to the jungle hospital and leper village where his idealism has created a haven of mercy in the midst of Africa's violence, misery and superstition.

Mrs. Esther Howard
Medical Librarian

Carlson School for Cerebral Palsy announces two informal summer sessions for ambulatory Cerebral Palsy patients. First session: June 15-August 1; second session: August 1-September 15.

Located on ocean; swimming pool; supervised therapy.

For information write to Carlson School, Pompano Beach, Florida.



This is your MEDICAL ASSOCIATION

Mark Cogswell Receives 50 Year Pin



Dr. Howard Saylor, Pres. of Huron District Medical Society presenting 50 year pin to Dr. Mark Cogswell of Wolsey, S. D., at the April 11th meeting of the District Society. Dr. Peeke and Mr. Foster were present. The meeting was attended by 37 members, wives and guests.

R. C. MEDICS HOLD MEETING

The Rapid City Medical Society held its quarterly scientific meeting at the Arrowhead Country Club in Rapid City on May 2.

Dr. Elmer Rustin of Minneapolis spoke on "Some Practical Approaches to Allergy" at the afternoon meeting, and in the evening he showed movies and slides of his travels on several Africa safaris.

There was a social hour and a buffet dinner at the Country Club in the evening for doctors and their wives.

ABERDEEN DISTRICT SOCIETY MEETS

The Aberdeen District Medical Society held its regular monthly meeting Wednesday evening May 1 in the Mexican Room of the Sherman Hotel. About 30 men were present for a fine steak dinner. After watching the championship fight on T.V., Dr. D. Keith Millett, Orthopedic surgeon of Minneapolis, Minnesota discussed the subject, "Fractures in Children are Different," illustrated with numerous lantern slides.

DOCTORS-LAWYERS MEET IN HILLS

The members of the Black Hills Bar and Medical Associations met Saturday May 11 in the hospitality room of the Montana-Dakota utilities building in Rapid City for a Medical Legal Conference.

This program consisted of a presentation on "Medical Malpractice" by **Doctor A. A. Lampert**; "Res Ipsa and Malpractice" by Charles H. Whiting, LL.B., Rapid City; "The Interprofessional Code" by E. Holman, A.M.A., Department of Legal Medicine, Chicago, Ill.; "Doctor As A Witness" by G. A. Bangs, Rapid City; "Medicolegal Aspects Of Othopedics" by **H. A. Ahrlin, M.D.**, Rapid City; Film Medical Witness, courtesy of the American Medical Association; and Questions From Audience To Panel.

NEWS NOTES

An open house at the Murdo Auditorium was held April 17 honoring **Dr. Joseph Murphy** on his birthday and for his 24 years of service to the community.

* * *

Albertas Repsys, M.D., Woonsocket, became a citizen of the United States on April 16th.

* * *

Richard Cribbs, U.S.D. medical student, attended the annual meeting of the Student American Medical Association in Philadelphia this month. Part of the expenses were met by the S. D. State Medical Association.

* * *

Leo Graff, M.D. was named president of the Britton

Chamber of Commerce at its May meeting.

* * *

Karl Avots Avotins, M.D. will leave the community of Carthage July 1 to accept a position on the surgeons staff in a Veterans Administration Hospital in Texas.

Dr. Avotins has practiced in Carthage for a period of four years.

* * *

C. A. Johnson, M.D., Belle Fourche, South Dakota, moved to Lemmon, South Dakota, May 15.

Dr. Johnson came to Belle Fourche in 1950 from Wichita, Kansas.

* * *

The Brookings Clinic moved to their new building, located at Seventh Street and Main Avenue.

Doctors located in the Brookings Clinic are: **Drs. D. C. Austin, Magni Davidson, R. B. Henry, W. A. Patt, M. C. Tank, C. S. Roberts, Jr.**

* * *

Dr. Paul G. Bunker of Aberdeen presented a paper on the "Unusual Foreign Body Experiences in Air and Food Passages" at the regular meeting of the Minnesota Academy of Ophthalmology and Otolaryngology at the Minnesota Club in St. Paul, Minnesota on February 8.

* * *

The Seventh District Medical Society met at the Elks Club in Sioux Falls on May 7. Forty-four doctors attended the business session. tended the business session to make final arrangements for the 76th Annual Meeting.

ANNUAL MEETING SIDELITES

Half the doctors in S. D. attended the recent Annual Meeting in Sioux Falls. All toll, there were 253 doctors, 195 guests, and 75 exhibitors.

* * *

Dr. Odland, Luverne, Minn.; **Dr. R. H. Hayes**, Winner; and **Dr. M. R. Gelber**, Aberdeen, won the door prizes.

* * *

Many in attendance expressed pleasure at the addition of a dance to the annual dinner. Also the entertainment rather than a "heavy" banquet speech.

* * *

Where were all the mirrors in the Cataract?

* * *

Attendance at the events was excellent. 222 attended the banquet, 212 the stag, 86 the ladies Sunday dinner.

* * *

Seventy-five sales representatives attended the 36 booths in the exhibit hall.

M.D.'s INVITED TO BAR MEETING

South Dakota doctors have been invited by the State Bar of South Dakota to attend the session in Watertown during the State Bar's Annual Convention on Aug. 28, 1957.

Melvin Belli of San Francisco, noted legal authority on tactics and personal injury cases will give a lecture on trial tactics and use a

demonstration to seal his points. The doctors are also urged to stay over and hear Judge R. Medina who will be the banquet speaker.

S. F. ASSISTANTS ORGANIZE

A meeting of the Sioux Falls Chapter South Dakota Assistants' Association took place last May 20, at the Sioux Falls Clinic Bldg. The officers elected were Pres. Margaret Clair; V. Pres. Molle Vanderbush; Sec. Ruth Finley and Treas. Mrs. James Bezpaletz.

A report was given of the State meeting which took place in Huron the 11th of May.

Plans were discussed for the next meeting, scheduled for the 10th of June, and weather permitting it will be a picnic. The program committee will be in charge of arrangements.

TECHNICIANS WANT M.D. MEMBERS

The South Dakota Society of X-Ray technicians has issued an invitation to all radiologists and other physicians interested in the field of X-Ray to become members of the Society. Membership dues are \$3.00. Requests for information should be directed to Sister M. Simplicita, St. Anthony's Hospital, Martin, S. D.

S. D. STUDENT IS SCIENCE AWARD WINNER

A 17-year-old girl from South Dakota and a 16-year-old boy from Maryland won the honor of showing their prize-winning science exhibits to the nation's medical profession along with professional displays at the American Medical Association's annual meeting in New York City on June 3-7 this year.

The winners, Dorothy Lundquist, a senior at Webster High School, Webster, S. Dak., and Warren Edward Prince, a junior at Northwestern Senior High School, Hyattsville, Md., were selected at the Eighth Nation Science Fair conducted by Science Service to receive the American Medical Association's special awards.

Miss Lundquist, whose father is a medical technologist and whose mother is a registered nurse, won her top award with a study entitled "The Effects of Inadequate Sleep Upon Physical and Mental Alertness." She says that she hopes to study medicine or psychology at the University of South Dakota.

The American Medical Association award is bestowed in addition to the regular prizes at the National Science Fair. These citations include a plaque and an all-expense paid trip to the A.M.A. convention in New York.

The winners were announced by Dr. Dwight H. Murray, president of the A.M.A., on May 10 following a talk on "Living Molecules," by Dr. Wendell Stanley, Nobel prize winner, professor of biochemistry and director of the Virus Laboratory at the University of California, Berkeley, California.

The winners were selected by a panel of six judges, who are nationally recognized doctors, Dr. Alphonse McMahon, associate professor of medicine at St. Louis University and chief of medicine at St. John's Hospital, St. Louis, Mo., speaking for all the judges, said that "the exhibits at the National Science Fair were of exceptional quality and presented a very great problem for the judges."

USD's DR. COX INVITED TO NEW GROUP

Dr. Charles D. Cox, professor and chairman of microbiology and Public health at the University of South Dakota School of Medicine has been invited to become a charter fellow of the American Academy of Microbiology, executive secretary Dr. G. I. Wallace announced.

The academy "is to be made up of well-qualified microbiologists in all branches of the science throughout the U. S. and Canada. Invited charter fellows are distinguished in the field of microbiology with wide training and experience."

Wallace states the purposes of the organization, to promote the highest professional standing of microbiologists; to carry on professional activities on behalf of the science of microbiology; to promote programs of recognition, certification and accreditation on microbiologists where needed to accomplish those purposes.

Dr. Cox obtained three degrees from the University of Illinois. During World War II he was a captain in the U. S. Army in charge of bacteriology in the CBI Theatre Medical Laboratory. He is a native of Danville, Ill. and he was graduated from high school at Oakwood Township, Fithian, Ill.

AAPS ANNOUNCES ESSAY WINNERS

Winners in the Annual Association of the American Physicians and Surgeons essay contest were announced recently. National a-

wards went to Sonia Gustavson of Olivia, Minnesota; Jane Bruce of Hot Springs, Arkansas; Gail Ellis of South Roxana, Illinois; Jack Armstrong of Edwards, Mississippi; Nancy Neighbors of Sheridan, Wyoming and Geraldine Ramey of Fort Smith, Arkansas.

The South Dakota State Medical Association sponsors the contest each year and has previously placed winners in the top three spots in the national awards.

CHICAGO HOSTS ENT PROGRAM

The Department of Otolaryngology, University of Illinois College of Medicine, announces its Annual Assembly in Otolaryngology from September 30 through October 6, 1957. The Assembly will consist of an intensive series of lectures and panels concerning advancements in otolaryngology, and evening sessions devoted to surgical anatomy of the head and neck and histopathology of the ear, nose and throat.

Interested physicians should write direct to the Department of Otolaryngology, 1853 West Polk Street, Chicago 12, Illinois.

CARDIAC CLINIC SCHEDULED


Plans for a Midwest Cardiac Clinic to be held October 3, 4 and 5 have been announced by the Iowa Heart Association, sponsors of the projected scientific session. Although details are still in the planning stage, it is established that the session will be held at the State University of Iowa Hospital. No registration fee will be charged.

PSYCHIATRY FOR G.P. STUDY

Announcement is made to the medical profession that the American Psychiatric Association has set up a project to study ways by which a greater understanding of psychiatry can be conveyed to physicians in general practice. The project has been made possible by a grant from the National Committee Against Mental Illness.

The project will be administered at the Central Office of the American Psychiatric Association under the Medical Director. Dr. Charles E. Goshen will be the Project Director. Dr. Warren C. Johnson, Assistant to the Medical Director, will also contribute to the work. A Liaison Committee with the American Academy of General Practice will serve the project in an advisory capacity.

The Liaison Committee has proposed that the general urgent need for expanding psychiatric services in communities throughout the Nation can most readily and practicably be met by general practitioners if they can be armed with appropriate basic knowledge of psychiatric skills and practices. Ways must be explored to accomplish this — by setting up model post-graduate courses, developing standards for training, training films, courses materials, and above all a broad promotional effort which will stimulate the general practitioner's interest in psychiatry and community action in this area.



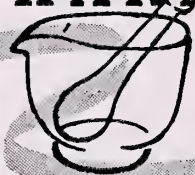
PHARMACEUTICAL

SECTION

HAROLD S. BAILEY, PH.D.
EDITOR

Division of Pharmacy
College Station, South Dakota

PHARMACEUTICAL *Paper*



THE PRESCRIPTION, THE PHARMACIST, THE VETERINARIAN*

By William A. Knapp, Jr., D.V.M.**
Athens, Georgia

Much has been said in recent years regarding the dispensing of drugs by the practicing veterinarian, and at the present time it is apparent that this phase of practice is quite popular. This popularity is due to a number of reasons with which most of us are familiar: extensive advertising, countless numbers of articles urging the practitioner to dispense on a wholesale basis, economic conditions in some localities, and tradition. Very little has been said, by comparison, concerning the writing of prescriptions in our profession. In fact, this subject has not only been slighted, but grossly neglected.

Both dispensing and prescribing have advantages and many of these are well known to the veterinary practitioner. However, it might be well to briefly consider the direction in which we are going as a profession.

Veterinary medicine today is quite similar in many respects to the medical profession at the turn of this century. Then, at the time of graduation, the young medical doctor moved to the town of his choosing, built a small clinic and dispensed his own drugs. The situation was especially true if he chose a small town in which to practice. His patients would come to his office or small hospital and request a remedy for a cough, constipation, or a cold, and the doctor would remove from his cabinet or shelf some drug for the stated con-

dition. In the patient's mind, the remedy was of primary importance — not the diagnosis.

There were many reasons for this type of medical practice at that time. Some major reasons were perhaps the scarcity of well equipped centrally located hospitals, inadequate numbers of trained pharmacists and conveniently located pharmacies, and the lack of adequate rapid transportation as compared with subsequent years.

It was not long, however, before medical practice evolved to something similar to its present day status by the removal of many of the previous reasons for the old type practice methods. Well equipped, centralized hospitals were built; office type practice came into being and the small, inefficient clinics all but vanished; and the medical doctors returned to writing prescriptions instead of dispensing their own formulae and drugs. Once again, a definite and proper distinction was made between the medical profession and the pharmacy profession.

Notice the similarity between our profession today and the medical profession some fifty years ago. Today, upon graduation, our members move to the town of their own choice, and they also, must build their own small clinics (even though many other veterinary clinics are in the same area), and dispense their own drugs. In this case however, the reasons for this type of practice are not the same reasons that confronted the medical profession in 1900. The possible exception is the fact that we have not as yet progressed to

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**Dr. Knapp is assistant professor of Physiology and Pharmacology, School of Veterinary Medicine, University of Georgia, Athens, Georgia.

large centrally located hospitals staffed by veterinary practitioners.

The medical profession found a more efficient method of practice, and one often speculates whether the present system of practice in the veterinary field will undergo a similar evolution.

The prescription has played a vital part in the evolution of medicine. A brief review of the history of medicine and pharmacy will reveal that the distinction between the physician and the pharmacist has been made and discarded many times through the ages. And each time the physician returned to compounding his own drugs and acting as his own apothecary, it was not too long until he reverted to the previous physician-pharmacist relationship. It has been found that this is the best way for those two professions to serve the physical ills of mankind. The prescription is the key, the vital instrument, the life blood that nourishes the two professions.

Prescribing Offers Advantages

Many veterinarians have found that prescription writing is very advantageous also, and although it is confined primarily to small animal practitioners at present, this trend may spread into some select cases in large animal medicine. The small animal practitioner has "discovered" that prescribing offers several advantages both to him and to his client. Some of these advantages are:

1. He can charge just about the same fee as when he dispensed drugs, but he is getting paid for his services and knowledge and not just for the remedy.

2. He does not have the cost of the dispensed item to subtract from his fee. Thus, he actually nets more money on a particular office call.

3. Prescribing brings to the practicing veterinarian a vast supply of pharmaceuticals which he could never have on his shelves. Consequently, his drug of choice need not be limited to those he has on hand.

4. Prescription writing greatly reduces the amount of money that is of necessity tied up in drug inventory when one dispenses drugs.

5. If a client does not pay his bill, you have not lost the cost of the medicines dispensed to that person.

6. The veterinarian is more closely correlated to and identified with the medical profession when he writes prescriptions. The

client immediately feels that the veterinarian is on a more equal footing with the medical profession. This alone can greatly influence public opinion concerning our profession.

7. Prescribing will help eliminate ill feelings that have existed between the druggist and veterinarian for many decades. It can bring about mutual respect and cooperation in most instances. The prescription is perhaps the only method in which this traditional animosity can be resolved.

8. The client will frequently be more willing to pay two smaller fees than one large fee.

9. The writing of prescriptions is perhaps the best method to learn and appreciate drugs, their actions, indications and dosages. A person that is adept at prescription writing usually has more detailed information at his command concerning drugs than one who does not write prescriptions.

Admittedly, prescription writing in veterinary medicine has many disadvantages at the present time. The causes of some of these disadvantages vary from one location to another. Some of these disadvantages are:

1. Druggists sometimes consider themselves veterinarians, and are otherwise unethical.

2. Large animal practice does not lend itself well to prescription writing because it would be impractical for the livestock owner, the veterinarian, and even the druggist in most instances.

3. Some veterinary practices cannot function successfully without income derived from dispensing. There are several reasons for this situation. These practices may be located in marginal or borderline areas: periods of low farm income due to decreased value of livestock, droughts, and other economic conditions. Also, in such areas, the clients have been trained through the years to seek the remedy from a veterinarian and not his services. A period of re-education is necessary for such clients to pay a veterinarian for his services and brains, and not just for a bottle of medicine.

Animal Health Pharmacy

Recently, I was talking with a colleague and he stated that he had just heard (several years too late) that the pharmacy schools were teaching a course in animal diseases, and he was not hesitant to display his feelings concerning this "terrible turn of events."

Pharmacy schools also instruct their students in many of the ills of humans because it is a necessary part of their curriculum. How can a pharmacy student fully appreciate drug action when he knows nothing of the condition in which a particular drug is of benefit? It is true that some of the pharmacy students may, upon graduation, feel that their "short course" in animal diseases qualifies them to be veterinarians, but the majority of these students will use the information wisely — and perhaps with the hope of working harmoniously with the veterinary profession. One fact that perhaps many of us fail to appreciate is that the pharmacy profession knows more about drugs, drug actions, toxicology, dosage and the business aspects of pharmaceuticals than any other profession. We, in turn, know more about animal diseases, their diagnosis, prevention and treatment than any other profession. Surely, there is ample ground in which we can work together for mutual benefit. We, each, want to be recognized and respected for what we are, and for what we can do. If both the pharmacist and the veterinarian fully appreciate the abilities of each, and make use of the combined knowledge and talents that each possesses, and each exercise good faith in the business relationship, our traditional battles will be overcome. It may be that we, the veterinary profession, will have to initiate any progress made in that direction. If we do, the prescription is the key that will unlock the door.

Those members of our profession that have been writing prescriptions and calling the pharmacist for advice concerning a drug have found that the resulting business relationship soon becomes a personal friendship in many instances — and a druggist is a good friend to have. One veterinarian stated that in the course of a year, the druggists in his locality referred to him more business than he sent to them. Most of the prescriptions which he writes are for the treatment of small animal conditions, and he is very well pleased with his relationship with the druggists. Another practitioner friend stated that he reduced his drug bill by nearly \$3,000 the first year by writing prescriptions, and actually made more money because he charged the same fee for office calls as previously. More important was the fact that

his small animal clients liked to receive prescriptions for their pets.

Prescription writing will work for you and your clients. If you have not been writing prescriptions in the past years and think you might try it out, a few suggestions are offered:

1. Contact the druggists in your town that you feel will exercise good faith and are ethical.

2. Tell him what you are planning to do, and observe his stock in both the human and veterinary line. Actually, for small animals, you will perhaps be prescribing more drugs designed for human use than strictly veterinary drugs.

3. Do not feel that you are not doing your part if you only write a few prescriptions a week or even a month. It is not the quantity that you write that is going to affect your relationship with the druggist. The fact that you both have extended your hands in friendship and that you are writing some prescriptions is enough. If he, in turn, will refer clients with sick animals to you, then progress has been made and a goal has been attained.

4. If you expect to write prescriptions for some large animal conditions, remember that some of the drugs which we use for these animals are not stocked in most drug stores — and have not been stocked for many years. Such drugs as quassia, gamboge, capsicum, rhubarb, krameria, etc., are antiquated in human medicine. The druggist will probably have to order some of these especially for you, if you write them.

5. Do not expect the pharmacist to cease "over-the-counter" sales of such minor items as flea powders, shampoos, worm capsules, and other pet items. If he will refer definitely sick animals to you for diagnosis, and you do some prescribing for your out-patient cases, you both will have a mutually pleasant relationship.

6. In writing prescriptions, endeavor to use the metric system of weights and measures when possible, and do not be afraid of using trade names or prescriptions calling for only one item. Some 75% of all prescriptions written call for a single item, and nearly 60% of the prescriptions call for trade name items.

(Continued on Page 239)

PHARMACEUTICAL *Paper*



YOUR RESPONSIBILITY AS DIRECTOR AND PRECEPTOR OF BEGINNER PERSONNEL*

by John E. Quistgard**

Every day, in this state of Minnesota, many business men and women reluctantly but voluntarily subject themselves, as you have been doing, to many hours of listening to so called "experts." It is a well-known fact that most people do not enjoy business speakers, because most of these same people feel they know more about the subject than the speaker himself. Yes, though we all subscribe to this American custom, the strong competitive spirit of business today keeps us on our toes and urges us to attend continuation courses, such as we are completing this afternoon.

During my talk this afternoon I shall employ the word "apprentice," which I would like to interpret as meaning one who is actually obtaining apprenticeship prior to registration or one who has recently become registered and is taking his place in a retail drug store. Certainly we are safe in assuming that these apprentices have had thorough training in the art of pharmacy itself. Therefore, I plan to discuss only the problems which I feel are most neglected under our present apprenticeship training program.

As we all know, there exist today wide and varied discrepancies in the quality of apprentice training in the state of Minnesota.

*Presented to the 18th Continuation Study Course in Pharmacy, University of Minnesota.

**President, Minnesota State Pharmaceutical Association.

This problem of orienting, or introducing, a pharmacist to his profession has been with pharmacy ever since its beginning in this country. It has been obvious that from the very beginning practitioners of pharmacy in general have not assumed their responsibility for the necessary orientation of the apprentice in our profession.

The members of the State Board of Pharmacy have exhibited much interest and have devoted much thought to the quality of the one year apprenticeship experience obtained by our young men and women. However, we must realize that the successful outcome of such training is dependent upon the character and ability of the preceptor.

Since we in the profession were not assuming our share of the responsibility for orienting the apprentice to the profession, many schools of pharmacy have made attempts to carry out this task. Our schools have made an earnest effort at realistic orientation in model pharmacies and school supported hospital pharmacies. I, personally, feel that no school of pharmacy can give proper apprenticeship training by creating artificial environments simulating a good retail drug store. Actually, all pharmacists who act as preceptors become a part of the pharmaceutical educational system. As preceptors, they carry with them responsibilities and obligations. They must take a personal and professional interest in these apprentice pharma-

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1. Boger, W. P.; Strickland, C. S.; and Gylfe, J. M.
Antibiot. Med. & Clin. Ther. 3:378 (Nov.) 1956.


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cists if they expect them to reciprocate in kind.

Without a dedicated preceptor whose judgment is sound and mature, who is interested in the professional aspects of pharmacy, who is interested in training young people, and whose code of ethics is such that the proper environment is created for the young pharmacy apprentice, our apprentice system shall fail.

While acting as a preceptor for these future pharmacists, I feel that we must stress the importance of developing a good telephone personality. We must teach these apprentice pharmacists to pick up the phone the instant it rings. No one likes to be kept waiting. We must urge that they learn to keep their voices cheerful and distinct. Teach them to talk slowly, to impart to the customer the feeling that the most important thing we have on our mind, at the moment, is to properly take care of the person phoning. Always have paper and pencil available and immediately write down every order or message, distinctly. Listen carefully for the name and address of the speaker and learn to get it right the first time. We must set an example, when answering the phone ourselves, and show them that they should never make a promise they cannot keep. If there is any doubt, so inform the customer.

We must emphasize more strongly that any person, no matter how high his station, gets out of his work exactly what he puts into it. There are always merchandizing and managing opportunities open to those who will work for them.

More importance should be shown to punctuality, as lateness is a habit very easy to acquire. When I speak of punctuality, I believe we must include not only getting to work on time, but also getting things done on time — doing things when they should be done.

We must teach them to give more thought to watchfulness, as it is much easier to be careless than careful. It is very easy to slip into the habit of doing things without watching and thinking. In our profession this can be most costly and have most painful results. If we do not teach our apprentice pharmacists to watch what they are doing, and think about it clearly, they may learn to price mark incorrectly, break merchandise, or most

serious of all make errors in prescription compounding.

In today's competitive market, ample stress must be laid on neatness. The apprentice must always be sure he looks as clean and as neat as he should. He must be instilled with a desire to keep the store clean and displays neat and attractive. He must remember that he and the store should always be ready to pass the inspection of today's most critical shopper. A drug store is known by the customers it keeps. It is interesting to note that a recent survey of women shoppers by Advertiser's Exchange showed that 31 percent of them shifted their patronage from one store to another because of bad housekeeping.

The same survey showed that 44 percent of these same shoppers changed from one store to another because of bad manners. This shows the reason for stressing to our apprentice pharmacists the importance of courtesy and friendliness. These two go together. Courtesy and friendliness are two things we give away with every expectation of having them returned to us, but we don't come by them easily, and we can lose them without half trying.

I feel that we must demonstrate by our own actions that it is possible to run a drug store profitably as well as in a manner that will bring increased respect on the part of the public. We must prove that it would benefit the health of the nation if all medicines were secured from a pharmacist. We must conduct ourselves in such a manner as to add to the professional reputation of pharmacists. Convince the apprentice that the profession of medicine and the profession of pharmacy should be equally recognized as being important — not just medicine alone.

I often wonder to what extent we are providing the necessary opportunities and inspiration to oncoming generations of pharmacists. We must instill in their minds that steady work brings steady advancements in pharmacy. Teach them that every minute counts. Impress upon them that if they are selling they must be learning. During slack periods of the day, they should acquaint themselves more fully with the merchandise and services in the store. By proper example we can show our apprentice pharmacists the importance of reading trade journals regularly and thoroughly and can help them to

absorb what they read. By discussion and practical application, we can teach them to use the information they have absorbed. We must induce them to take suggestions to heart and to accept them in the spirit of helpfulness in which they are given. Teach them to look for opportunities to improve their knowledge, to get a firmer grasp on the drug business, and to apply themselves wholeheartedly to the job of getting ahead.

Salesmanship Our Weakest Link

One of the weakest links in our present training program is salesmanship. It is my feeling that this is one phase of business that can only be learned in a retail store. In discussing this very briefly this afternoon, I would like to mention a few of the major steps which should be taught and discussed with any younger pharmacist. He must learn to make his greeting warm and friendly. Experience will teach him to listen and not predetermine a size or need until the customer knows what sizes are available. It is important to repeat the product name and to take the customer to the product and recommend the proper size. He must be taught to make it as easy as possible for the customer to say "yes" by presenting the proper size and by the use of pre-tested, "magic" selling phrases. While selling, it is wise to use the pronoun "we" rather than "I." This will aid in convincing the customer that he or she has made the right choice. Both in and out of the prescription department, teach him to suggest related and unrelated items. When concluding the sale, thank the customer in such a warm way that he will want to come back.

We as preceptors must learn that training subordinates to perform the work assigned to them is a major function of every store owner. To be successful, we must assume final responsibility for this as part of our work. The reason so many drug stores have poor organization is that the coach, not the players, needs to understand the value of teamwork. We all know that the inefficient training of workers is a costly leak in any sales organization. However, a good executive always combines training with the delegation of responsibility, yet maintains supervision of the apprentice on his new job. Remember that it is easier and more economical to practice right habits than to be forced to correct wrong practices. I wonder if many of

us don't over-emphasize supervision and neglect the actual training. I feel that as trainers we must convince the trainee that he has a chance to realize personal benefits from his training experience, and must create in him a feeling of pride in his profession.

Often, I think we need to call to mind a similarity between the process of making a sale and the process of teaching an employee. As in selling, the first step in our effort is to sell **ourselves**. Then the apprentice, like the customer, will have confidence in us.

I always liked the attitude of a friend, in a small store, who had the reputation of being a very effective trainer of store personnel. When asked about his methods he was prone to reply, "First I tell them what I am going to teach them. Then I teach them. Then I tell them what I taught them."

However, we must remember that the most important equipment of any preceptor, or teacher, is a thorough knowledge of the subject he is to teach. Certainly you already know the occupation to be taught. You already have the skills and technical knowledge of the occupation of selling in your store. Therefore, you have the most essential equipment for teaching. In other words, you can do the job yourself, the job you are helping others to master. You can take this apprentice with his basic information, show him how to proceed, let him try his hand, and supervise his early efforts. By making corrections and giving additional suggestions when necessary, you can advise your apprentice in his preparation to practice pharmacy.

We know a gem is valueless until it is discovered. A skill is of little worth unless it is applied. Preceptors who have become proficient trainers, know and follow certain steps or patterns, which become quite simple when practiced.

As a preceptor you must remember to take the hard work out of your job. Don't develop the idea that you are Atlas carrying the world on your shoulders. Above all, don't take yourself too seriously. Determine to like your work. Have in mind a teaching plan. Don't try to do everything at once. Practice being relaxed with your apprentice and discipline yourself not to let small jobs accumulate.

Certainly we know that, as time goes by, it is you and I, the preceptors, who benefit most from our future pharmacists being given

a proper apprenticeship program. It makes for better and more efficient employer-employee relationship and gains more respect for the profession of pharmacy. It gives to the future pharmacists, their personal appearance and dignity, a "counter-side" manner equivalent to the "bed-side" manner of the physician.

What with more and more non-drug outlets handling drug store lines and competing aggressively for drug store business, it is vital that we keep our customers.

Each and everyone of us must do his utmost to uphold the characteristics that give to drug stores a distinctly different personality, a personality that distinguishes them from competing non-drug outlets.

We must remember that our sales personnel is our store! They provide the only personal touch of exchanging money for medication or merchandise. They are the living personality of our store. We must, as preceptors remind our personnel that the store exists for the customer, not the customers for the store. And, above all, we must remind our apprentice pharmacists that customers are a strange species, with a tendency to judge the whole store on the service they received at any one point in it.

Again, as preceptors, we must remind ourselves of our responsibility and that often impatience has prevented the cultivation of great minds. Assimilation of our profession is a slow process.

I am reminded of the story of James Garfield at the time he was president of Hiram College in Ohio. He encountered a father who asked him if the course of study couldn't be simplified to enable his son to go through by a shorter route. "Certainly," Garfield replied, "but it all depends upon what you want to make of your boy. When God wants to make an oak tree, He takes a hundred years. When He wants to make a squash, He requires only two months."

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Fellow Pharmacists:

In April I attended the Pharmacy Refresher Course and a Rotary Conference both the same week and both held in Brookings. Heard many good speeches, but was impressed most of all by the good fellowship of the townspeople and the college crowd, and how well they work together.

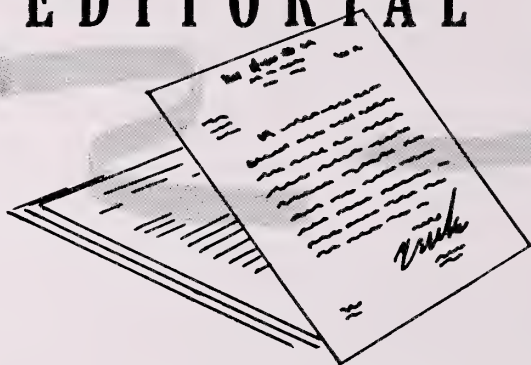
I learned, or relearned I should say, that I should be proud of my chosen profession, and I will say that the pharmacists of Brookings and the Pharmacy Division of the College set us a good example to emulate.

Dean LeBlanc informed me that they are graduating fifty-two this year from the Pharmacy Division. I want to take this opportunity to congratulate each and every one and wish them luck.

This will be my last page so I do want to say I have enjoyed having this opportunity to talk to all of you and occasionally hearing from some of you. The Convention is the thing now, and I hope to see you there.

Al Knutson, President

EDITORIAL PAGE



A.P.H.A. PRESIDENT CALLS FOR UNITY IN PHARMACY

John A. MacCartney, president of the American Pharmaceutical Association, told delegates at the annual national convention in the Hotel Statler, New York, that closer coordination among all segments of the pharmacy profession is essential for broader public understanding of its objectives, and "appears to be the fervent desire of the great majority of pharmacists in this country."

He said the A.Ph.A. "should be the organization to spearhead a determined campaign to develop this unanimity."

As spokesman for the association's more than 30,000 members, MacCartney said remarks on "unanimity of purpose" contained in his speech were based on "grassroot opinions" obtained in 55 appearances during the past year before various pharmacy groups throughout the country, personal contact with individual pharmacists, and "hundreds of letters I have received."

He recalled that in his inaugural address a year ago he had stated his beliefs "that we (pharmacists) should work vigorously to develop a greater spirit of mutual understanding, cooperation, and compatible public attitude among our various internal associations."

"I can now report to you that such an objective appears to be the fervent desire of the great majority of pharmacists in this country."

MacCartney said that during his term as A.Ph.A. president he had tried to stimulate thinking toward a "greater degree of professional cooperation among our national groups, to the end that the public will fully

understand that all of them have the same broad purpose of furthering the objectives of pharmacy and of contributing toward the betterment of all pharmacists, not just those in their own particular organization."

He cited the medical profession's ability to represent the specialized interest of groups within the broad profession of medicine and yet, when appropriate, "fully unite in a cohesive professional front to defend the prerogatives of any or all of their professional colleagues" as the desired aim of the pharmacy profession.

"In our profession, we have apparently not yet reached this desirable situation, but there are already a few indications that it may be possible for us to do so in the future," he said.

One such example is the recent formation of a combined committee of the A.Ph.A. and the National Association of Retail Druggists to meet with representatives of the American Medical Association in consideration of the problems inherent in the practice of clinic pharmacy and physician dispensing of medicines, he pointed out.

"It is the existence of such a combined committee that is encouraging when we anticipate future problems that will affect all pharmacists, and those, therefore, should be handled in a like manner."

"It would appear highly desirable that our various internal associations establish and maintain committees of this type on a permanent basis, and that the particular interests of the various member associations be resolved within such a committee to permit them to face mutual problems with an accep-

table and a mutually-agreed-upon course of action," he said.

MacCartney, who will be succeeded as A.Ph.A. president by Dr. Joseph Burt, dean of the University of Nebraska School of Pharmacy, emphasized he favored specialized organizations within the board framework of the pharmaceutical profession.

"But," he pointed out, "their peculiar problems should properly be handled within their own organizations and should not be the direct concern of an over-all body of pharmacists.

"Conversely, when action is indicated which reflects upon pharmacy as a profession, we should have, and must have, a powerful voice to speak for all of us.

"Since no one of our pharmaceutical organizations has, in its present membership, anything approaching a majority of the pharmacists in this country, we must either develop a smoothly efficient and cooperative team among our associations, or work harder to build up the active membership of the American Pharmaceutical Association to which they all can belong."

MacCartney also noted that Dr. Robert P. Fischelis, A.Ph.A. secretary and general manager, will retire from his post at the end of his present term, which expires in 1959. He said a seven-man committee had been appointed by the executive council "to immediately institute a search for a man to assume the duties of the executive secretary upon the expiration of the present incumbent's term of office."

Members of the committee include Dr. Hugo Schaefer, New York City; Dr. George Beal, Pittsburgh; Henry Gregg, Minneapolis; Dr. Fischelis, Washington, D. C.; Jack Heinz, Salt Lake City; Dr. George Archambault, Washington, D. C.; and Dr. Robert Swain, New York City.

COMMON COLD MAY BE ELIMINATED FROM VOCABULARY

A medical research investigator predicted recently that exacting medical scientists may succeed in eliminating the "common cold" from the vocabulary of our great-grandchildren.

Dr. Harry E. Carnes, clinical investigator for Parke, Davis & Company, said the num-

ber of respiratory infections generally classified as "common colds" is rapidly being reduced as scientists identify these illnesses more specifically. Therefore, while medicine may not provide a universal "common cold" cure, he indicated the disease will be defeated by a "divide and conquer" system involving a number of different treatments.

Dr. Carnes, who spoke at the 14th annual spring meeting of the Michigan Academy of Pharmacy at the University of Michigan, said definition of the common cold "has varied widely."

"In the older literature it was a much more inclusive designation than it is today," he said. "It is now defined as a mild, self-limited, respiratory illness, without fever, characterized by catarrhal inflammation of the mucous membranes of the nose, the sinuses, and contiguous structures of the upper respiratory passages."

Among the prominent features of the cold, Dr. Carnes said, are dry and scratchy throat, and irritative cough, swollen and congested mucous membranes, and watery eyes. However, he pointed out that "considerable variations are seen in 'colds' as they occur in different persons and even in the same person at different times."

Dr. Carnes told the pharmacists that some colds may differ by the areas they attack, while others may differ in the severity with which they strike. He said some colds are mild without reactions affecting other body systems, while others are more severe with fever, chilliness, a general feeling of illness and weariness, and "other constitutional symptoms."

"Clinically, then," Dr. Carnes said, "the diagnosis of the 'common cold' encompasses illnesses which may represent variations of a single disease entity, or which may be due to multiple agents.

"Regardless of the definition, the 'common cold' affects 25 percent of all U. S. working adults in January and February alone. Colds and other respiratory infections cause more than 50 percent of all industrial absenteeism, costing an estimated \$5,000,000,000 (B) per year," he pointed out.

In recent years, Dr. Carnes explained, progress has been made in separating some of

the entities from the "common cold" classifications. Known causes, he said, can generally be grouped as "noninfectious" and "infectious" agents.

He said examples of the noninfectious agents are sudden temperature changes, irritating gas such as chlorine, dusty air in a barn at haying time, and other contaminating dusts and pollens. He added that with the exception of hay fever and asthma, reactions to these physical, chemical and nervous stimuli are "usually of relatively brief duration."

Nevertheless, he said these reactions are frequently classified as "colds" and "in no small measure are responsible for the reputation of miraculous remedies which advertisements claim cure a cold 'if taken early enough'."

The second classification is the infectious or biological agent — the virus and bacteria which invade the human body to cause disease, and which can be passed from one individual to another.

He said a physician first must give consideration to the possibility that an acute respiratory infection may be the beginning of some well-known disease such as whooping cough, diphtheria, measles, or streptococcal sore throat. Or in rare instances, Dr. Carnes explained, the respiratory illness could be the start of one of the more unusual diseases such as "Q" fever or psittacosis (Parrot fever).

He branded the influenza viruses as being "among the agents which have been proven to be the cause of acute respiratory disease." He said a "large number" of acute respiratory illnesses still remain when known causes of these diseases have been eliminated as being responsible for the ailment.

Dr. Carnes said infections resulting from these unknown causes are the ones which scientists now are in the process of identifying. Each time research experts succeed in "branding" one of these respiratory infections, the area of the "common cold" is narrowed.

Dr. Carnes said newly developed laboratory methods of isolating and growing viruses in tissue cultures have furthered these studies and "have raised hopes that virus immunizing agents may be developed."

"A year from now," he predicted, "these

unlabeled areas of respiratory infections will be smaller, for we shall have unlocked another mystery or two. As time passes, we may have no need to use the expression 'common cold' — it will have been 'branded' — and our reason for having missed work yesterday will certainly be more scientifically correct."

WISCONSIN BOARD ISSUES DISPLAY CARDS

The Wisconsin Board of Pharmacy is attempting to help pharmacists within their State explain why certain restrictions are placed on the sale of some items which are sold in drug stores. Display cards which are 5" x 8" with the words "NOTICE TO THE PUBLIC" in bold type at the top, are supplied by the Board and distributed to all drug stores within the State as a means of informing the public of the restrictions concerning unauthorized refills, requests to return or exchange drugs and sales of hypodermic syringes and materials. Another card is an explanatory one for use of the pharmacist himself. At the bottom of the card the words "WISCONSIN STATE BOARD OF PHARMACY" appear giving official authority to the statement which appears on the card.

Thus far, four cards have been mailed to the pharmacists of Wisconsin for prominent display and include the following messages:

(1)

State laws prohibit the refilling of certain prescriptions. When your pharmacist complies with the law by refusing to refill a prescription, he is doing so for your welfare. We know that you appreciate your pharmacist's interest in your behalf.

(2)

Sales of hypodermic syringes and materials are to be recorded by the pharmacists. This record shall include the purchaser's name and address, and the name of the attending physician. The purpose and use of these items must be stated.

(3)

This notice relates to codeine and dihydrocodeinone as the only narcotic drug exemptions and appears behind the prescription

areas for the use of pharmacists.

(4)

Return or Exchange of Drugs Prohibited. Drugs, medicines, sick room supplies, and items of personal hygiene shall not be accepted for return or exchange by any pharmacists or pharmacy after such drugs, medicines, sick room supplies, or items of personal hygiene have been taken from the premises where sold, distributed or dispensed.

The Board feels that this procedure, which has proven popular with the pharmacists of their state, is a means of informing the public of the protection to public health afforded by the Board of Pharmacy and will enable pharmacists to answer questions in a simple manner.

The value of the display cards is twofold in that it improves the Board's relations with its pharmacists because it acts as a public relation tool for the profession as a whole.

THE PRESCRIPTION, THE PHARMACIST, THE VETERINARIAN—

(Continued from Page 230)

However, when possible, write an official preparation. The writing of lengthy prescriptions, especially of antiquated vintage, is a thing of the past.

7. Write legibly. There is no excuse for an unreadable prescription. Poor penmanship is not a qualification for prescription writing.

The veterinarian-pharmacist relationship is working in many areas, and can work in more instances if we, as a profession place service as our primary offering, and not just the remedy; and if the druggists, as a profession, realize that they are not veterinarians and do not enter our field. In that way, we will hurt no one, and at the same time will be overcoming an unpleasant situation that has existed many years. In addition, we will be elevating our profession in the eyes of the public. The prescription may well be an instrument of magic.

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PHARMACY *News*

SCHOLASTIC HONORS AWARDED

Four outstanding pharmacy students were awarded honors for scholastic achievement recently.

Merck Awards for high honor were awarded to **Mary Lou Scheurbrand**, Mitchell, and **Robert Monroe** of Milaca, Minnesota. These awards each consisted of copies of the Merck Manual and Merck Index.

The Lehn and Fink Gold Medal was awarded to **Gerald Martinka** of New Ulm, Minnesota, and **Douglas Huewe** of Dell Rapids received the Bristol Award — a copy of the Modern Drug Encyclopedia.

FIFTY PHARMACY SENIORS GRADUATE

Approximately fifty seniors, comprising the largest graduating class in the history of the Division of Pharmacy, South Dakota State College, received diplomas June 3 at the 71st annual commencement exercises.

The new pharmacists were granted the Bachelor of Science in Pharmacy degree upon completion of the regular curriculum. In addition, some of the graduates have completed the required year of pharmacy internship.

The State Board of Pharmacy written and practical

examinations were given to these graduates June 4, 5 and 6. Those graduates who had completed internship requirements took both examinations, while those who had not completed their internship will take the practical examinations next year.

GRADUATE ASSISTANT APPOINTED

Stanley Shaw has been appointed graduate assistant in pharmaceutical chemistry at South Dakota State College, President John W. Headley announced following approval of the Regents of Education.

A graduate of Parkston High School, he received the Bachelor's degree from State College in Pharmacy.

Mr. Shaw will assist in the instruction of students in the quantitative pharmaceutical analysis and biochemistry courses while studying toward a Master of Science in Pharmacy degree with a major in pharmaceutical chemistry.

DISASTER PLANNING WORKSHOP

Disaster planning and nursing will be subjects of a workshop offered July 1 through 12 at South Dakota State College.

Instructor will be Helen M. Flanagan, consultant, disas-

ter nursing, for the 16-state American Red Cross Midwestern area, with headquarters in St. Louis, Missouri.

The workshop is open to professional nurses who would be involved in organization of the community within institutions and agencies in case of a natural or accidental disaster to a large group of people, or in civil defense, states Helen Gilkey, Director of the Division of Nursing at State College.

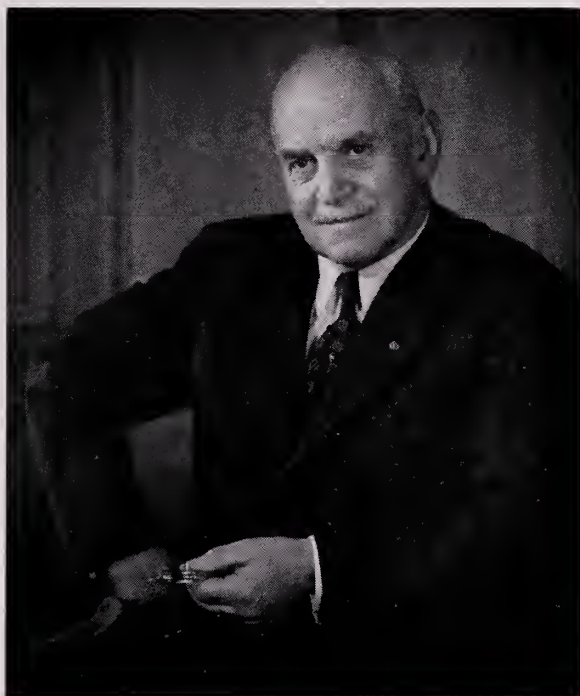
WORKSHOP ON AGING

Problems of the aging will be subject of a workshop scheduled at South Dakota State College, July 15 to 26.

The workshop on aging, to be sponsored jointly by the Division of Nursing and the Department of Rural Sociology, will be conducted under the supervision of Howard M. Sauer, acting head of the Department of Rural Sociology, and Helen H. Gilkey, Director of Nursing.

Genevieve R. Soller, nursing consultant with the U. S. Department of Public Health, and a specialist in physical and mental health, will be a consultant for the two-week workshop. Three quarter hours of graduate or undergraduate credit in either nursing, rural sociology or education may be earned in the workshop.

DISTINGUISHED SERVICE AWARD — 1957



Will E. Donahoe, M.D.

Doctor Will E. Donahoe is a native South Dakotan, being born in Sioux Falls, Dakota Territory on May 18, 1886. He graduated from Medical School of Illinois University in 1912 — and Pediatric Post Graduate at the University of Iowa in 1920. He was married to Florence Fleming of Sioux Falls in 1917 and has two daughters, Betty and Virginia. Following interne-ship he began General Practice in Sioux Falls in 1913 and in 1920 limited his work to Pediatrics and Public Health.

He has an outstanding record for Public Service. In 1920 he brought the first immunization against Diphtheria and in the same year started the first Clinic physician to the public schools, and for eleven years without compensation. From 1920 to 1936 he served as part-time Health Officer of the City of Sioux Falls. During these years he was active in the State and Allied Groups in Public Education to enact improved sanitation laws, milk handling and pasteurization, tuberculosis control by tuberculosis testing of school children, and enforced cattle testing and the State Bureau of Vital Statistics. From 1936 to 1940 he was Superintendent of Minnehaha County Board of Health, during which time he personally checked the physical aspects of the 100 rural schools as regarded safety and health. Conditions were terrible with 60% of the drinking water unsafe. This resulted in correction and improvement in every instance.

He was active in the organization of the South Dakota State Health Officers Association and as its president consolidated the group with the Tuberculosis Society as the "South Dakota Public Health and Tuberculosis Association." In 1933 he formulated the idea of greater political and economic strength in a union of the Allied groups in Sioux Falls in 1936 — 1100 attending the Banquet.

In the depression years of the thirties the Government established the "Farmers Aid Corporation" which required much time in its administration.

Doctor Donahoe had served three successive terms as President of the Seventh District Medical Society and as its Delegate to the State Association in the late twenties. He later served on the State Council until his retirement as its Chairman in 1945. He is on the active staff of Sioux Valley Hospital, McKennan Hospital and attending Physician to the South Dakota State Children's Home, Presentation Home and Lutheran House of Mercy. He has served on the Executive Boards of the Red Cross and Salvation Army and at present is serving on the Executive Board of the Volunteers of America. He is Co-chairman of the Inter Hospital Committee in Sioux Falls, Co-chairman of the State Medical Association. He is State Chairman of the American Academy of Pediatrics, holding Chairmanships of "Committees on Medical Education" and "Juvenile Delinquency," and is the District Chairman of the Nominating Committee. He promoted the Guild of Catholic Physicians and has since been its President.

He is Clinical Professor of Pediatrics at the Medical School of the University of South Dakota. He organized the first Boy Scout Troop in Sioux Falls in 1914. In 1938 he received the Silver Beaver Award of the Boy Scouts of America. He has served on the Executive Board of the Region and is still an active Volunteer Scouter. Doctor Donahoe served in the Medical Corps of USA in World War I and was Commander of USPHS of Armed Forces Reserved from 1944 to 1954. He was a Charter Member of the American Legion, Past State Master of Fourth Degree Knights of Columbus, a Member of the Chamber of Commerce, Rotary, Elks, Walton League and the Minnehaha Country Club.

Doctor Donahoe's Professional Society Memberships include in addition to local, State and AMA, a Diplomate of the American Board of Pediatrics, Fellow in the American Academy of Pediatrics, the Northwestern Pediatric Society, Sioux Valley Medical Society (P.P.), Fellow in the Academy of International Medicine, Past Fellow in the American Public Health Association, and Past Fellow in the American Association of School Physicians, and the Nu Sigma Nu Fraternity.

In 1952 he received the Distinguished Community Service Award from the Cosmopolitan Civic Clubs of Sioux Falls, captioned for "CHARITY AND CHILDREN."

Doctor Donahoe's devotion to his patients, his family, his Church and his community is in accordance with the highest traditions of American Medicine.

PROBLEMS OF HOUSING THE AGED

At a meeting in Sioux Falls June 26th a group of persons interested in problems of housing the aged gathered to hear representatives of the Federal Housing Administration discuss the part played by the agency in such housing.

The Federal Housing Administration will guarantee funds for rental housing for the aged provided that the mortgage shall be executed by a mortgagor which is a financially qualified nonprofit organization acceptable to the FHA. To qualify as a nonprofit organization, the applicant for mortgage insurance must be a tax exempt organization within the meaning of paragraph 501 U.S.C.A., Title 26, Internal Revenue Code:

To be "financially qualified," such nonprofit organization must meet the following conditions:

- a) Be a fraternal, religious, charitable or other organization, having among its objectives a recognized interest in furnishing adequate housing for aged persons;
- b) Enjoy existence in perpetuity or an assured life exceeding the maximum mortgage term; and
- c) In addition to anticipated rental income (taking into account the varying ability of elderly occupants to pay), be possessed of sufficient earned or contributed income, or income producing assets, to reasonably assure meeting debt service requirements and operating expenses for the life of the mortgage.

Minimum Property Requirements under the FHA regulations will permit:

- a) Nonhousekeeping, living units or rooms.
- b) Recreational, social and other common facilities.
- c) Housekeeping, linen and other personal services necessary for such contemplated home life.
- d) Management operated cooking and dining facilities, supply for foods, its storage, preparation and service.
- e) Infirmary as well as facilities for professional services, outbed treatment and personal care incidental to physical and mental health.



PENTOTHAL ANESTHESIA IN
OBSTETRICS
F. D. LEIGH, M.D.
HURON CLINIC
HURON, SOUTH DAKOTA

INTRODUCTION

It is not the purpose of this paper to present anything new or astounding, but merely to reiterate our findings and satisfaction with the use of Pentothal Sodium as an anesthetic in obstetrics. Interest in Penothal Sodium as an anesthetic in obstetrics began with La-Breque,¹ who published a report of its use in 44 cases in 1938. Seven other reports were found in literature to the end of 1951. Rucker² reported in 1943 a series of 100 cases. In the following year, Hellman³ published the largest series to date, 1,415 deliveries. Dipple⁴ reported 350 cases in 1947. In 1948 Herrick⁵ wrote of its use in 492 cesarean sections. Cooley and Schwarz⁶ published a series of 316 cases in 1948 and in 1954 Boyd and Jones⁷ described 294 deliveries under this anesthetic. Also, in 1951 J. C. Whyte⁸ reported a series of 500 consecutive cases. To my knowledge there has been no previous report in South Dakota.

1. LaBreque, F. C.: New England Journal of Medicine 219:954, 1938.
2. Rucker, E.: Virginia Medical Monthly 70:35, 1943.
3. Hellman, L. M., et al.: AMERICAN JOURNAL OF OBSTETRICS AND GYNECOLOGY 48:851, 1944.
4. Dippel, A. L., et al.: Surgery, Gynecology and Obstetrics 85:572, 1947.
5. Herrick, F. L.: AMERICAN JOURNAL OF OBSTETRICS AND GYNECOLOGY 55:883, 1948.
6. Cooley, C. L., and Schwarz, H. F.: Western Journal of Surgery 56:278, 1948.
7. Boyd, K. B., and Jones, A. R.: AMERICAN JOURNAL OF OBSTETRICS AND GYNECOLOGY 59:931, 1950.
8. Whyte, J. C.: AMERICAN JOURNAL OF OBSTETRICS AND GYNECOLOGY 63:163, 1952.

TECHNIQUE

During the first stage of labor Demerol in 100 milligram doses was used every two to four hours as needed for the relief of discomfort. When the dilatation was complete, the patient was placed on the delivery table and a sterile draping done. A sterile vaginal examination was done at this time and if complete dilatation was confirmed and station was 1 - 2+, the left arm was secured to an arm board and Pentothal Sodium, $\frac{1}{2}$ gram, was mixed in 30 cc. of sterile saline in a 30 cc. syringe, making a 1.6% solution. The needle (Number 20) was inserted into the antecubital vein. It is our practice to almost routinely use an outlet forceps in our deliveries which seems to be an accepted obstetrical procedure at this time. Pentothal was then administered until the patient was asleep. We found in our series that on the average between 15 and 30 cc. was required for the entire procedure. Pentothal was used for the delivery and also for the repair of the episiotomy and the completion of the third stage of labor.

MATERIAL

This series consists of 451 cases during the years 1953, 1954, 1955 and 1956. This work was done in the Obstetrical Department at Saint John's Hospital, Huron, South Dakota. We have compiled more complete statistics on 50 of these cases, which will be presented in the following portion of the Paper.

TYPES OF DELIVERIES

OUTLET	LOW	MID	EPISIOTOMIES	TEARS	PRIMIPARA	MULTIPARA
27	19	2	24	14-1°	13	37

TIME OF ADMINISTRATION OF
ANESTHETIC UNTIL BIRTH

2 minutes = 11 cases	6 minutes = 7 cases
3 minutes = 10 cases	7 minutes = 2 cases
4 minutes = 11 cases	8 minutes = 1 case
5 minutes = 7 cases	12 minutes = 1 case

TIME FROM BIRTH UNTIL BABY CRIES

23 cried at once	1 cried 1½ minute later
19 cried ½ minute later	1 cried 2 minutes later
6 cried 1 minute later	

EFFECT ON THE MOTHER

On questioning the mothers following delivery and especially those who had previously had experience with an inhalation type of anesthetic, they much preferred the Pentothal to the inhalation. The induction of anesthesia is quite rapid and pleasant. The return to normal, depending on the amount given, is quite rapid. There was some drowsiness following the anesthetic to the point where the mother preferred to sleep for an hour or two following delivery, but could be aroused easily. However, I consider this an advantage and not a disadvantage because I believe that she needs the rest at this time. I found no unusual blood pressure changes during or after delivery. Ten cases had no pre-delivery medication, 40 cases had pre-delivery medication, and we found that these cases with medication required much less Pentothal for a very satisfactory anesthesia. Three cases vomited prior to the anesthetic, one vomited during the anesthetic, and one had a mild laryngeal spasm during the anesthetic.

EFFECT ON THE INFANT

There were no fetal deaths. There were 4 cases of mild cyanosis and 1 case had to be resuscitated. There were 2 unusual cases which are described below. These were both low forceps and there may have been factors other than the anesthetic.

1. Baby moderately cyanotic. Low forceps used. Upon birth baby appeared sleepy, was awake, opened eyes, after some

stimulation (spanking) cried vigorously 2 minutes later.

2. Baby moderately cyanotic. Low forceps used. Upon birth cord tightly wrapped around baby's neck. No resuscitation, only oxygen inhalation. Anesthesia began 11:15. First cry 11:16, a very weak cry; at 11:18 a good vigorous cry.

PRECAUTIONS

1. I do not believe this anesthetic should be used other than for a cephalic presentation and definitely not in a breech or twin.
2. A trained anesthetist should administer the anesthetic.
3. There should be a person in attendance who is capable of inserting an endotracheal tube quite rapidly in case of laryngeal spasm.
4. The anesthetic should not be administered more than 15 minutes before delivery of the baby.

SUMMARY

In conclusion we feel that Pentothal is a safe and valuable anesthetic for use in obstetrics in the hands of an experienced anesthetist. The induction is easy and rapid and the side effects are minimal. There was no vomiting and the mothers were well pleased. It may be used in all types of deliveries with the exception of those mentioned above. It has been our experience that the baby was not overly anesthetized any more than with inhalation anesthetic providing the anesthetic was not used for over 15 minutes duration before delivery of the child.

I wish to express my thanks to members of the Anesthetic Department of the Saint John's Hospital, Huron, South Dakota, and especially to Sister Dorothea, who was very helpful in compiling the data presented in this Paper.



RECOVERY OF SEVERE CONGENITAL ATELECTASIS

C. L. Swanson, M.D., Pierre, S. D.

With the advent of alevaire and other related products, more interest in congenital atelectasis has been fostered. Despite the progress in this field, the mortality rate in severe congenital atelectasis is very high.

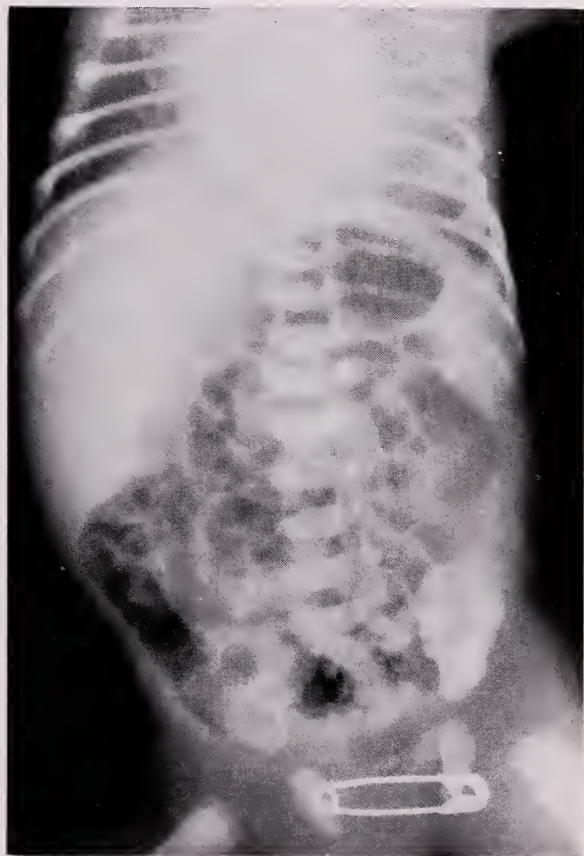
The case presented seems rather unique in that a complete recovery, with such a marked degree of atelectasis, is uncommon.

On December 31, 1956, Mrs. C. C. gave birth to a seven pound eight ounce male child. It was her second child and the delivery was uneventful. The child failed to breath spontaneously until aspirated with an intratracheal catheter. After a few minutes of breathing O_2 through the catheter, the baby began to have respiratory movements and a fair cry. It was taken to the nursery and placed in an incubator and O_2 , shortly thereafter, because of cyanosis, dyspnea and tachypnea. Examination at this time revealed a well-nourished, white male infant, somewhat cyanotic, with respirations of approximately 100 per minute, marked intercostal and sternal retraction and accentuation of all secondary respiratory musculature. Alevaire was instigated, and the O_2 held at 35%; 300,000 u. of penicillin were ordered daily for prophylaxis.

The baby was removed from the incubator for a few minutes on January 1st for an x-ray. There was no improvement at this time and the cyanosis and dyspnea were severe at the time of x-ray; complete blood count was Hemo. 18 grms.-124%, RBC — 5,080,000, WBC — 21,700, PMN — 76, Lymph — 23, Mono. —

1, Normoblast — 1, Remarks: Mod. polychromasia of RBC noted. The x-ray showed almost complete atelectasis of the right lung, and over fifty percent of the left.

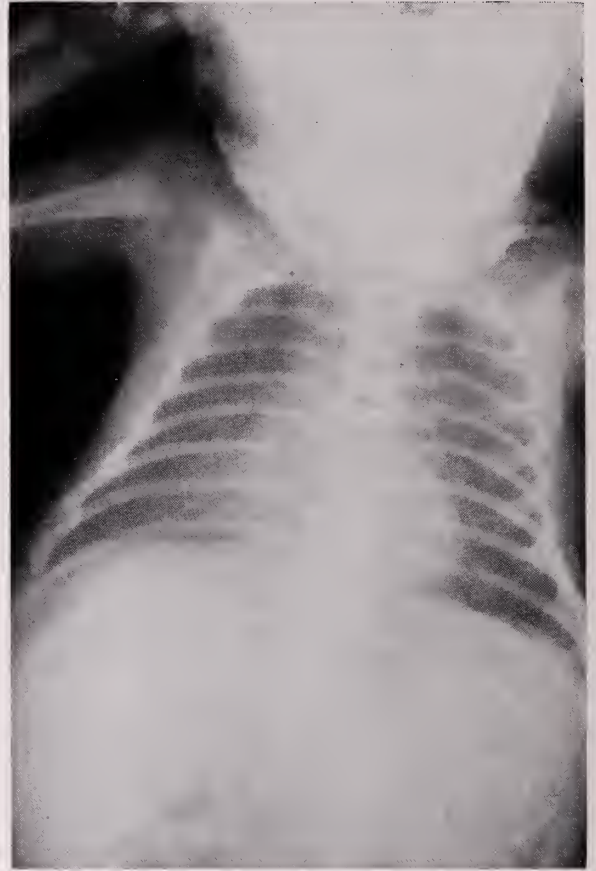
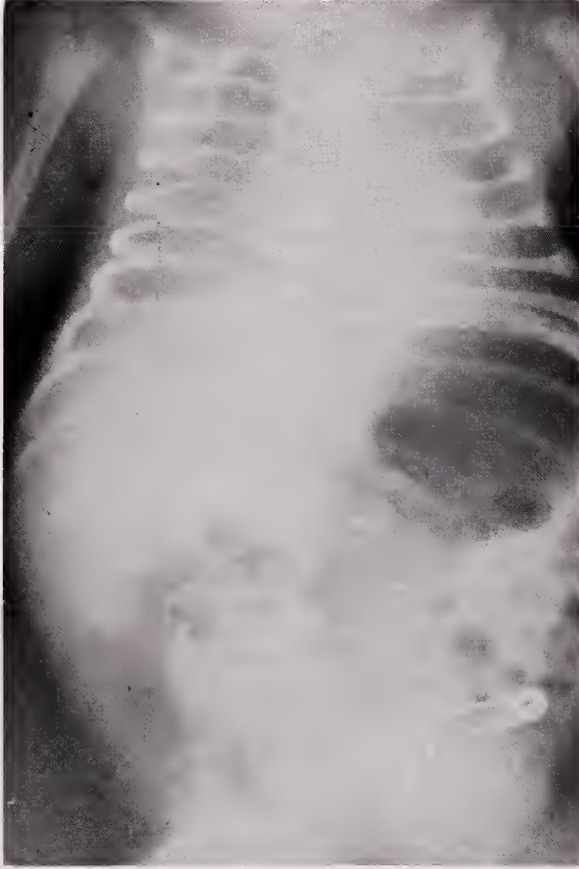
Despite O_2 , alevaire and tergemist, the baby's condition seemed worse. On January 2nd it was again removed from the incubator and an intratracheal catheter was used with



some success. The catheter was passed as far as possible beyond the bifurcation of the trachea. A fair amount of thick mucous was aspirated in this manner.

After the second intratracheal aspiration, the baby's condition steadily improved. January 7th showed much more expansion of both lung fields. The baby began to take one to two ounces of formula. It was removed from O_2 this day for a few minutes. The res-

pirations gradually returned to normal and O_2 was withheld completely on January 8th. An x-ray of January 11th showed almost complete recovery of the atelectatic lungs.



Summary: A case of severe congenital atelectasis, with recovery, is presented. The repeated use of an intratracheal catheter may be indicated in cases which respond poorly after primary aspiration.

PHYSICIANS AND PSYCHIATRISTS FOR CALIFORNIA

State hospitals, correctional facilities and veterans home. No written exam required. Three salary groups:

Increases being considered effective July. U. S. citizenship and possession of, or eligibility for California license required.

\$10,860 to \$12,000; \$11,400 to \$12,600, \$12,600 to \$13,800.

Write:

Medical Recruitment Unit, Box A, State Personnel Board, 801 Capitol Ave., Sacramento, California.

"MEDICARE" CONTRACT RENEWED

The "Medicare" contract between the Department of Defense and the South Dakota State Medical Association and the South Dakota Medical Service has been renewed until May 1958.

No major changes were made in the agreement with the exception that arrangements are being worked out to provide quicker payment to physicians for services rendered.

"Medicare" payments to physicians in South Dakota are now in excess \$10,000.00 per month.

The History of the South Dakota State Medical Association

(Continued from June)

Clark J. Pahlas

Pierre, South Dakota

In addition to the prime importance placed on state legislation, the State Medical Association maintained an active interest in federal legislation as well. Through the years numerous issues arose between the medical profession and the federal government. The reduction of taxes in 1925 and the provisions of the Narcotics Act in 1926 gained some little attention. However, it was not until the 1930's that federal legislation became a number one topic for discussion among members of the profession.

The association's interest in national political issues was focused on "social welfare" legislation, the effects of which permeated American society during the 1930's. This welfare legislation, evolving from the "social justice movement" of the early 1900's, with the depression of 1929 acting as a catalyst, was looked upon as a savior by many and as a threatening constrictor by others. A great quantity of this legislation passed by the New Deal centered around the formation of government agencies to administer relief to those ravished by the economic crash.

In reaction to such social changes brought about by these New Deal innovations there came from some the cry of "socialization" and "welfare state." Among those groups which were disturbed by these social changes was the medical profession. Its voice, the American Medical Association, as early as 1920, declared its opposition to any form of medical services "provided, controlled, or

regulated by any state or the federal Government."²³ This opposition was encouraged in the state organizations as well, and by the late 1930's and early 1940's the medical profession stood unified against the threats of socialized medicine.²⁴

The primary concern in the present work, however, is not to elaborate on the legislation itself, but to show the effects of this legislation on the medical profession and the South Dakota State Medical Association's part in opposing it.

WELFARE LEGISLATION

The beginning of the welfare legislation affecting the medical profession came in 1933 with the passage of the Federal Emergency Relief Act. This act provided for the creation of the Federal Emergency Relief Administration under the direction of Harry L. Hopkins. The purpose of this agency was to grant federal funds ". . . to the states and territories to be expended as public assistance to the unemployed, either as direct benefits in cash or in kind, or as wages on work projects on public property."²⁵ The State Medical Association was directly concerned with this law,

23. **Proceedings of the House of Delegates of the South Dakota State Medical Association, Annual Session of 1920**, Unpublished manuscript on file in the office of Dr. R. G. Mayer of Aberdeen, South Dakota.
24. Although the profession was unified against socialization, with the return of prosperity and the outbreak of World War II, the threat of socialization abated by itself as the need for welfare legislation began to disappear.
25. J. T. Adams (ed.), **Dictionary of American History**, Scribner's, New York, Vol. I, p. 257.

inasmuch as medical aid was given to the needy through the Relief Administration. Concerning this relief, the members of the association felt that the "indigent poor" should be helped, but warned against subsidizing the pauper and the "deadbeat."

The association, however, did not object to the federal medical aid to the needy. Its objections came when the federal agency regulated the medical fees to be charged "relief" patients. Inasmuch as final medical action in this public welfare program would rest with the physician, it was felt by the association that it should be consulted in establishing such policy as fee bills.²⁶

The organizational structure of the medical relief program in South Dakota as directed by the Federal Emergency Relief Administration consisted of two segments. First, the Medical Relief Committee of the State Medical Association which took care of the administration of the state-wide program, acting as the liaison between the Emergency Relief Administration and the medical relief committees of the district medical societies. In turn, this second segment of the organizational structure supervised the relief programs carried on in the individual districts, making monthly reports to the state committee. This type of organization of medical relief, under the Federal Emergency Relief Administration, centering around the State Medical Association had its shortcomings of restriction, favoritism, and the like. However, "... the program worked best where the state medical societies organized and directed the delivery of the medical care;" as opposed to those states where other organizations acted as the agency in dispensing medical relief.²⁷

In carrying out the provisions of the Federal Emergency Relief Act in South Dakota, the State Medical Association accepted its duties to provide ample medical care for the indigent. However, it also maintained its responsibility to safeguard the interests of the profession. The association, in this respect, had no intention of harming the private practice of medicine by participating in medical relief in any form except as an emer-

gency measure. To strengthen this intention, it maintained as its prerogative the right to designate the termination of the emergency.²⁸

"SOCIALIZED MEDICINE"

From 1935 to 1939 the South Dakota State Medical Association opposed another federal act which it felt threatened the prerogatives of the medical doctor. This measure, the Wagner Act, was opposed on the grounds that it placed the "... responsibility of administration and supervision of medical services for crippled children and preservation of child and maternal health in the Children's Bureau of the Department of Labor." An additional grievance was that this proposed measure created a Social Insurance Board, without specification as to the ability of its members to administer the functions of old age pensions, unemployment and health insurance.

It also created compulsory sickness insurance whether administered by the federal government, governments of individual states, or by any industry, community or similar body.²⁹

The State Medical Association, following the lead of the American Medical Association, went on record in opposition to the above-mentioned compulsory sickness insurance provision of the Wagner Act. It stood opposed to:

... any such efforts at regimentation of the medical profession and lay control of medical practice as being fatal to medical progress and tending inevitably to lower the quality of medical service now available to the American people.³⁰

The issues of socialized medicine were continually before the association during the 1930's and 1940's. The belief was expressed a number of times by prominent members that the profession had been "... visited by certain groups of uninvited and unwelcome satellites ... groups of profit seekers, paid reformers, unscrupulous politicians and the

26. The fees were set according to "customary" rates with 15 per cent discount.

27. Louis Hopewell Bauer, *Private Enterprises or Government in Medicine*, Charles C. Thomas, Springfield, Illinois, 1948, p. 39.

28. *Journal Lancet*, LIV (July 15, 1934), 425-29.

29. *Journal Lancet*, LV (October 1, 1935), 651. Although hearings were held on the bill, nothing ever came of it.

30. *Journal Lancet*, LV (October 1, 1935), 651. The American Medical Association looked back on two primary sources (other than the need arising during the depression years) which

(Continued on Page 249)

paid agents of certain philanthropists."³¹ The social worker was attacked as selfishly favoring socialized medicine for financial gain. The "unscrupulous politician" was attacked as favoring socialized medicine in order to control "... a vast new patronage army. Hundreds of choice jobs will be his to pass out."³²

It was also feared that through such socialization of medicine as seemed to be suggested in the Social Security Act of 1935 the osteopaths might legally gain the right to do government work. It was felt that this would tend to lower medical standards.³³

Perhaps the greatest opposition to any federal legislation was directed against the Murray-Wagner-Dingell Bill proposed in 1945. This measure, in the words of the association, provided a "... system of compulsory sickness insurance, grants and loans for the construction of health facilities, grants to states for public health services, also a comprehensive public assistance program, and a national system of public employment offices."³⁴ The State Medical Association looked upon this bill as the "... most important piece of national legislation, as far as the medical profession is concerned, ever intro-

duced into Congress."³⁵

In 1946 the State Medical Association's president, Dr. William Duncan of Webster, expressed the views of the association against the above bill and against socialized medicine in general. Because these words of Dr. Duncan sum up rather well the association's argument against the bill and socialized medicine, they are quoted extensively as follows:

First of all, this bill is compulsory; the people will be compelled to pay the tax and physicians will be compelled to take part in it, even though the bill as written does not say so.

Furthermore, there is hardly a shred of evidence that enactment of this bill will produce better medical care for the people. Experience in foreign countries which have had socialized medicine for many years does not show this to be the case, and under our present system this nation is the healthiest of all the larger nations in the world.

The cost of the program would be tremendous. According to a recent study by E. W. Wilson published in *Barron's National Business and Financial Weekly*, the total annual cost of social insurance (of which compulsory health insurance would be a large part) would be somewhere between one-seventh and one-sixth of the annual payroll, or 10 to 12 billion dollars, using the average figures for the past ten years or so. Foreign experiences definitely indicates that no sound economy can bear such a cost and still maintain the momentum of private incentive and enterprise.

In addition, the bill is un-American not only in principle, but perhaps in origin also. States' rights would be interfered with, the private practice of medicine as we know it today would be destroyed, physicians would lose their professional independence, and we would all be regimented under a veritable dictatorship headed by the Federal Security Administration.³⁶

Such were the views of the State Medical Association toward the evils of welfare legislation and its offspring, socialized medicine.

FOOTNOTE 30—

(Continued from Page 248)

influenced the federal government to attempt the establishment of compulsory insurance programs in the United States. The first of these originated with the reports given by the Committee on the Costs of Medical Care, which functioned from 1927-1932, under the auspices of such groups as the Rockefeller and Russell Sage Foundations. The Majority Report given by this committee in 1932 recommended group medical practice, which eventually could have led to compulsory insurance. The second source of influence, according to the American Medical Association, was the report given by the National Health Survey. This survey, beginning about 1935, was carried on by the WPA to establish the amount of chronic sickness and the amount of medical care received by the general public. The survey concluded that an estimated one third of the population of the country was unable to afford medical treatment. The American Medical Association felt that both of these surveys were unreliable. For a good coverage of these two surveys by a leading member of the American Medical Association, see Louis Hopewell Bauer's book, *Private Enterprise or Government in Medicine*, Chap. 6.

31. *Journal Lancet*, LVII (September, 1937), 397.
32. *Journal Lancet*, LVII (September, 1937), pp. 398, 399.
33. *Loc. cit.*
34. *Journal Lancet*, LXV (September, 1945), 334.

35. *Journal Lancet*, LXVI (August, 1946), 259. A previous bill by the same name and also proposing compulsory sickness insurance was introduced in Congress in 1943. Both bills came to a hearing and died in committee.
36. *Journal Lancet*, LXVI (August, 1946), 261.

Born of necessity during the hungry years, socialized medicine lived on to plague the profession.³⁷

FARMERS AID CORPORATION

The era of social legislation was felt even more directly in agricultural South Dakota when in 1935 the federal government established the Resettlement Administration. This organization was established as an independent agency in the Department of Agriculture. The officials of the Resettlement Administration "were eager to push bold schemes involving the rehabilitation of almost a million lower class farmers and the removal of 500,000 farm families from submarginal land."³⁸ Two years after its establishment in 1935 the Administration was reorganized as the Farm Security Administration. This new agency had the "... authority to lend money to enable enterprising tenants to become landowners, refinance and rehabilitate small farmers who were in danger of losing their lands, promote withdrawal of submarginal land, and extend assistance to migratory workers."³⁹

The State Medical Association was primarily interested of course in the money made available through the Farm Security Administration to help pay medical and surgical expenses. To handle this money South Dakota established the Farmers Aid Corporation. Through this program the Farm Security Administration lent money to its clients in South Dakota. This money was pooled in a central fund to be used for paying medical bills. This fund was administered by the South Dakota Farmers Aid Corporation to provide medical care for the clients of the Farm Security Administration. This money made available by the federal government was pro-rated among the medical profession as follows: physicians to receive 51%; hospitals, 39%; dentists, 6%; druggists, 3%; and nurses, 1%. This proportion was not found satisfactory and was changed later so that the

hospitals received a little larger per cent than these figures show.⁴⁰

Thus the resources of the Farmers Aid Corporation were limited by the amount the Farm Security Administration was able to borrow from the federal government. The State Medical Association felt this amount was too low to pay even for emergency medical care at reduced rates.⁴¹

The Professional Inter-Allied Council met in August, 1939, to establish a small experimental emergency aid program which was to be independent of the Farmers Aid Corporation. The Pierre Medical District, comprising twelve South Dakota counties in the west central part of the state, was chosen as the site for the experiment.⁴²

The new organization, known as the Pierre District Medical Aid Association, was practically the same as the old Farmers Aid Corporation except that it handled its own funds through its own auditing committee. By having its own auditing committee it was felt "... that the administration of funds shall be entirely done by the group itself, and the group is small enough so that padding the accounts and so forth will be almost out of the question."⁴³ The total amount loaned by the Farm Security Administration to members of the Pierre Association was \$33.00 per family, per year. This was not to exceed in the aggregate the sum of \$60,000 per year, which would supply medical care for about 1800 families.⁴⁴

With the war years, 1941 to 1945, came increased prosperity, and the need for the Farmers Aid Corporation and the Pierre Medical Aid Association was no longer pres-

(Continued on Page 254)

37. For the association's struggle to avoid socialization during the late 1940's and early 1950's see the section dealing with Medical Education, Chapter II, of this thesis.
38. Arthur S. Link, *American Epoch*, Knopf, New York, 1955, p. 404.
39. *Ibid.*, p. 417. For a good account of the medical program of the Farm Security Administration see *Voluntary Medical Insurance in the United States*, by Franz Goldmann, Columbia Press, 1948, Chap. 7.

40. *Journal Lancet*, LIX (July, 1939), 290.
41. *Journal Lancet*, LX (July, 1940), 304.
42. By the time the Pierre Medical Aid Association was in motion (April, 1941), there were 14 counties included. For additional information on this Pierre Association see *Journal Lancet*, LX (July, 1940), 305; LXI (July, 1941), 264-67; and LXII (August, 1942), 292.
43. The Federal Security Administration in its investigation of fourteen South Dakota counties found irregularities in connection with claims made for medical care through the Farmers Aid Corporation. See *Journal Lancet*, LX (July, 1940), 304.
44. *Journal Lancet*, LX (July, 1940), 305. The Pierre Medical Aid Association made it clear that it was functioning only on an emergency basis.

THE REDFIELD STATE HOSPITAL AND SCHOOL*

A. A. Thompson, Superintendent, Redfield
State Hospital and School
Redfield, South Dakota

I appreciate the opportunity to appear before your group, the South Dakota Mental Health Association, and to bring to you some information concerning the Redfield State Hospital and School, its policies and program. It is rather difficult to know just what might be included in a discussion of this type in order that those things in which you are most interested can be touched upon. After the conclusion of this short discussion, if those things which you are most interested in have not been presented, I hope that you will feel free to express yourselves and make your interests known.

I very much dislike anything that sounds like a "progress report"; too often it stresses the positive and omits those items which are negative in nature, and too often it gives the impression of being comparative in nature, past and present, and too often gives the impression of a boasting attitude.

I am sure that we will all agree that the best understanding of any operation can come from first hand observation through actual visitation. While we have been stressing this, and encouraging it from all parts of the state, we realize that not everyone can follow this procedure, but we also feel that it is extremely important that as many people as possible be given some understanding of the institution. We therefore feel that the second best method of developing some understanding is that of talking about it, and so, avoiding as much as possible any semblance to a "progress report," I will proceed to give you some information concerning the Redfield State Hospital and School. I will briefly emphasize what we consider its strengths and its weaknesses, and also welcome your individual evaluations. We do like to think we have made some progress, but are also ready to admit that we have made mistakes and to admit that much still needs to be done.

ADMISSIONS

Of primary concern to most groups concerned with mental health is the matter of admissions, admission trends, and admission policies. Waiting lists are often inquired about, and they do have far reaching effects upon not only the children involved, but the members of their immediate families. More liberal appropriations in recent years has done much to relieve the housing shortage, and has made it possible to greatly increase the admission rate. During the biennium July 1, 1954, to June 30, 1956, there were 182 admissions. Since July 1, 1956, there have been 72 admissions, or a total of 254 new patients in less than three years time. The present population of the institution is 990, as compared with 840 on July 1, 1954. Additional buildings and additional funds for the remodeling and repair of present buildings will give us, in the very near future, room for an additional 100 patients.

The present urgent waiting list contains only 16 names; 7 of these have been authorized to be admitted between now and May 23. I am sure that this raises the question in your mind, "If there is room for an additional 100 patients, how do you account for the fact that there are any names on the present waiting list?" This can best be answered by explaining what the admission trends have been during the past several years. We find that the general admissions over the past three years have been of the lower mental levels, and also of the lower age group. This has completely filled the existing wards for this type of patient, and in addition has filled all those that we have been able to reconstruct to take care of this type of patient. In 1944 50% of the admissions were of the Moron level; during the past five years only 30% of the first admissions have been of this level. Of the last 62 admissions, approximately 50% were ten years of age or younger. During the period 1944 to 1946, only 25% of the first admissions were ten years of age or younger. Of the 16 children who are now on our present urgent waiting list, the oldest is 14 years

*Presented at the Mental Health Association meeting in Mitchell, May 3, 1957.

of age, the youngest is 2 years of age, and the average age is 8 years. To the present time admission policies have been based on two factors, namely, on the date of commitment to the State Commission, and the urgency of the individual case. The urgency being determined by the social history developed by reports of the county welfare department, the county sub-commission, and studies made by the representatives from the institution. The minimum age of admission has been set at four years of age, but with the addition of new buildings, we have been able in some cases of extreme emergency to admit children as young as two years of age. The last legislature gave us funds for a building which will be designed to house younger children, and it is our hope to eventually set two years as our minimum age for admission. The national trend is toward the admission of infants, and at the present time about one-half of the states have no minimum age requirement. Many arguments can be presented pro and con on this matter, and even the authorities in the field do not agree on this policy.

Policies on releases and vacations have been quite liberal. During the period July 1, 1954, to June 30, 1956, there were 36 releases from the institution. Since July 1, 1956, there have been an additional 17 releases, and at the present time we have four out on trial release. We feel that it is very important that all possible contacts between the home and the children be continued. For this reason vacations are freely granted during the Christmas season and during the summer months. During this past Christmas more than fifty went home for the season, and during the past summer the number on a daily basis ran from 40 to 60, — some of them for only a few days, and some of them for the full period of summer vacation, or three months. We have found that often times this continued contact has led to an understanding of the child by the parents and relatives to a point where the release was found to be feasible.

PERSONNEL

Increased appropriations for personnel has made it possible to increase the number of workers, and it appears that increased salaries have given us some opportunity for selection. On July 1, 1954, there was a total of 175 employees for the patient population

of 840, or 4.8 patients for each employee. At the present time there are 221 employees for 990 patients, giving us a ratio of 4.5 to one, which approximates very closely the national average. At the beginning of the past biennium there were 75 ward attendants, or an average of 11.2 patients per attendant, and at the present time there are 110 ward attendants, or an average of 9. This figure is very near the national average. This increase of personnel has made it possible to divide larger wards, and where we at one time had 23 wards for 840 patients, we now have 33 wards for 990 patients, which has reduced the number of patients in each ward from 37 to 30.

Of course these factors have brought an increase in the per capita cost of daily operation from \$1.76 in 1954 to \$2.25 in 1956, a figure which is about 75c per day below the national average. The increased salary appropriation has by no means solved the personnel problem entirely. We are still getting a much more rapid turnover in the attendant group than is desirable for any continuing program. There is evidence that this is not entirely a matter of salary, for it seems that individuals that seek this type of work are a somewhat unsettled group. This is more evident in the case of men employees than it is in the women employees, who seem to be more settled in their employment desires. Another important factor in this excessive turnover of employment is the fact that applicants who work in this category are usually of the higher age level, and reach the retirement age within a few years after their original employment. There is some evidence which tends to indicate that we are getting a slight decrease in the turnover, for in 1954 there was a 31% turnover in the number of employees in the attendant group, and in 1956 the turnover was only 22%. This would indicate a wholesome trend if it can be continued.

The age of all applicants and employees in the attendant group is a problem of no small degree. The age of those caring for, working and playing with children is important, and for this reason we have made a distinct effort to reduce the average age of ward attendants. In November, 1954, the average age of men was 59, of women 54, and the general average was 56.6. In November, 1956, the average

age of men was reduced to 57.6, women to 51, and the total average was 54. At the present time the average age of men attendants is 56.8, women 49, and the total average is 52.7, or an approximate reduction of four years in the average age for the total group. Our goal is to get the average eventually below 50.

To this point things mentioned have been largely those of a material nature, or are things greatly dependent upon building and salary appropriations. Each is certainly meaningful in a total program, but certainly less meaningful unless the welfare of the child and its family are given the utmost consideration.

It is a definite responsibility when another person's child is placed in one's care. It is felt by a baby sitter who may have the child for only a few hours; by a friend when a child stays at his house over night; by the teacher who has the child for a good share of the day; but most of all it is felt by those who are charged with the year round residential care and training. No one person can be all things to children in his care, and the responsibility increases many fold as the number of children increases. It then becomes a matter of delegation of responsibilities and the development of a general philosophy. To this time our main task has been to determine the areas for placement of emphasis, and to develop an order of "first things first." Initial consideration was given to those factors which had to do with the care of the present population. There are now two full time M.D.'s on the medical staff, and in addition there is available the consulting services of three physicians. These physicians are available and are used for all surgical cases. Dental services are provided and office help has increased the coverage of this department. Nursing services have been increased by additional personnel and placement of a supervising nurse on the male wards. A training program for attendants has definitely increased the efficiency of this group. The course is taught by the doctors, nurses, psychologists, matron, and other members of the staff. The program is designed to give a better understanding of the retarded child, a better understanding of the institution and its general program and philosophy, and a better understanding of living and working with people. The second point of emphasis decided upon was that of

training and education. Emphasis was placed upon a formal education program which is designed to meet the needs of the individual. Its purpose is to give that type of training which will allow the best adjustment possible whether the future of the individual might be in the community, or continue to be in a residential setting. This program is under the direction of the school principal who has seven teachers in this department. The informal or occupational training program is also designed to be of help to assist the individual in making himself a useful member of society, again whether he may find himself in some community or may continue to be in a residential environment. To assist in this program, there has been appointed a director of training whose responsibility it is to assign and follow up the job activities of all patients participating in this particular program. Time will not permit a detailed explanation and discussion of the scope, functions, and purposes of the various outlets in each of the training programs.

ACTIVITIES

A third consideration for emphasis was given to a program of activities and recreation; a program designed to add to the enjoyment of living, to the development of concepts of social relationships, and to give the individual a feeling of importance and personal satisfaction. Handicrafts, music therapy, moving pictures, social gatherings, dances, organized games, T.V. reception, hikes, picnics, shopping trips, and trips away from the grounds, are all a part of the program. Each is designed as much as possible to give enjoyment and at the same time afford opportunity for personal development in appearance, dress, social behavior, and dependability.

The fourth point of emphasis decided upon was the relationship with the parent and the general public. This is a phase of the program that should be of utmost importance to any group interested in mental health. There is no question but that many of the families of handicapped children are faced with a problem related to mental health. The anxieties, fears, frustrations of each family concerned are serious in many cases, and anything you or we can do to alleviate this tension is of utmost importance. For this reason, we have endeavored to improve our admis-

sion procedures. Pre-admission conferences and visitations are recommended wherever feasible. Conferences with psychologists, doctors, nurses, and ward visitations are held at the time of admission. Follow-up letters are written to parents shortly after admission, and prompt replies are made to all letters from that time on. Visitations by the parents are encouraged, and visits with the institutional personnel are of utmost importance. Visits on the wards wherever possible, and a chance to meet the attendants who regularly provide the ward care, is important in developing confidence.

Increasing psychological services and consultations within the community are considered a necessity. During the past biennium 848 first mental evaluations were made; 396 of these were found to be mentally deficient. The psychologists held conferences with nearly 300 families — a valuable service in itself.

We have encouraged the public to visit the institution and be taken on tours of the facilities. Over 2000 have responded since July 1, 1954. An invitation is extended now to each of you, and we hope that you will find it possible to do so at some time in the future. I might add that we do not need to be informed beforehand. Anything that we can do or that you can do to give people a complete understanding is sure to help the mental health of families who some day might have to face the problem of placing their child in a residential school. One needs only to review the status of mental deficiency a few decades ago, to understand the advances that have been made in the general public attitude. The present acceptance by the public of these so handicapped can be largely attributed to increased understanding, and the inclusion of their problems in the activities of groups such as yours.

SPECIAL PROBLEMS

I promised at the beginning to include special problems. They are largely in the area of special personnel. A graduate social worker, a physical therapist, a chaplain and recreational director are the most urgent present needs. They are included in the budget for the next biennium, but to secure them is the problem to be solved. There is a definite need for reorganizing the medical record system, and the completion of a training

guidebook for attendants. We hope that the record system can be improved soon, and the guidebook is now in the process of being developed.

It is our desire that at some time in the future we can serve in a cooperative program for the training of teachers in special education and as a laboratory for those majoring in psychology.

Much more in detail could have been mentioned about the program and about problems. I hope enough has been given to encourage some discussion.

In the June issue (page 48) We listed the recipient of the 50-Year Award as Dr. A. H. Hayne — This should have read "Dr. A. H. Hoyne."

THE HISTORY OF THE S. D. STATE MEDICAL ASSOCIATION—

ent.⁴⁵ In 1942, looking back to those years when need for federal aid did exist, the State Medical Association made the following comment:

It should be remembered that without the help of the Federal Agency in rehabilitating the farmer of this territory during the years of drouth and grasshoppers — our people would have been forced to leave the state or go on relief. Today, as a result of that rehabilitation, thousands of our farmers are rapidly regaining their earning power and former financial status.⁴⁵

45. *Journal Lancet*, LXI (August, 1942), 293. The records of the Pierre Medical Aid Association run to 1942, and the Farmers Aid Corporation was disbanded that same year.

(To be Continued in August)

PAN-PACIFIC SURGICAL TO HONOLULU

The Seventh Congress of the Pan-Pacific Surgical Association will be held in Honolulu, Hawaii November 14-22, 1957. All members of the profession are cordially invited to attend and are urged to make arrangements as soon as possible if they wish to be assured of adequate facilities.

An outstanding scientific program by leading surgeons with sessions in all divisions of surgery and related fields promises to be of interest to all doctors.

Further information and brochures may be obtained by writing to Dr. F. J. Pinkerton, Director General of the Pan-Pacific Surgical Association, Room 230, Young Building, Honolulu, Hawaii.

AMA DELEGATES' REPORT*

NEW YORK SESSION, JUNE 3-7

Revision of the Principles of Medical Ethics, relations with the United Mine Workers of America Welfare and Retirement Fund, the federal government's Medicare program, new standards for medical schools, a new statement on occupational health programs and the issue of Social Security benefits for physicians were among the wide variety of subjects acted upon by the House of Delegates at the American Medical Association's 106th Annual Meeting held June 3-7 in New York City.

Dr. Gunnar Gundersen of La Crosse, Wis., member of the A.M.A. Board of Trustees since 1948 and chairman for the past two years, was unanimously chosen president-elect for the year ahead. Dr. Gundersen, who also was first chairman of the Joint Commission on Accreditation of Hospitals from 1951 to 1953, will become president of the American Medical Association at the June, 1958, meeting in San Francisco. There he will succeed Dr. David B. Allman of Atlantic City, N. J., who became the 111th president at the Tuesday night inaugural ceremony in the Grand Ballroom of the Waldorf-Astoria Hotel.

The House of Delegates voted the 1957 Distinguished Service Award of the American Medical Association to Dr. Tom Douglas Spies, head of the department of nutrition and metabolism at Northwestern University Medical School, Chicago, and director of the nutrition clinic at Hillman Hospital, Birmingham, Ala., for his outstanding contributions to the science of human nutrition. For only the third time in A.M.A. history, the House also voted a special citation to a layman for outstanding service in advancing the ideals of medicine and contributing to the public welfare. Recipient of this award was Henry Viscardi Jr. of West Hempstead, N. Y., founder and president of Abilities, Inc., which employs only severely disabled persons.

Physician registration at the New York meeting had already reached an all-time high

at 5 p.m. Thursday with 18,982 counted and scores of registration cards still unprocessed. The previous high was chalked up at the 1953 New York meeting when the five-day total was 17,958 physicians.

New Principles of Medical Ethics

The House approved the long-discussed revision of the Principles of Medical Ethics, originally submitted at the 1956 annual meeting in Chicago. The final version, presented by the Council on Constitution and Bylaws and then amended by reference committee and House discussions in New York, now reads as follows:

"PREAMBLE

"These principles are intended to aid physicians individually and collectively in maintaining a high level of ethical conduct. They are not laws but standards by which a physician may determine the propriety of his conduct in his relationship with patients, with colleagues, with members of allied professions, and with the public.

"Section 1. — The principal objective of the medical profession is to render service to humanity with full respect for the dignity of man. Physicians should merit the confidence of patients entrusted to their care, rendering to each a full measure of service and devotion.

"Section 2. — Physicians should strive continually to improve medical knowledge and skill, and should make available to their patients and colleagues the benefits of their professional attainments.

"Section 3. — A physician should practice a method of healing founded on a scientific basis; and he should not voluntarily associate professionally with anyone who violates this principle.

"Section 4. — The medical profession should safeguard the public and itself against physicians deficient in moral character or professional competence. Physicians should observe all laws, uphold the dignity and honor of the profession and accept its self-imposed disciplines. They should expose, without hesitation, illegal or

*Prepared for delegates by the Secretary's office of the AMA.

unethical conduct of fellow members of the profession.

"Section 5. — A physician may choose whom he will serve. In an emergency, however, he should render service to the best of his ability. Having undertaken the care of a patient, he may not neglect him; and unless he has been discharged he may discontinue his services only after giving adequate notice. He should not solicit patients.

"Section 6. — A physician should not dispose of his services under terms or conditions which tend to interfere with or impair the free and complete exercise of his medical judgment and skill or tend to cause a deterioration of the quality of medical care.

"Section 7. — In the practice of medicine a physician should limit the source of his professional income to medical services actually rendered by him, or under his supervision, to his patients. His fee should be commensurate with the services rendered and the patient's ability to pay. He should neither pay nor receive a commission for referral of patients. Drugs, remedies or appliances may be dispensed or supplied by the physician provided it is in the best interests of the patient.

"Section 8. — A physician should seek consultation upon request; in doubtful or difficult cases; or whenever it appears that the quality of medical service may be enhanced thereby.

"Section 9. — A physician may not reveal the confidences entrusted to him in the course of medical attendance, or the deficiencies he may observe in the character of patients, unless he is required to do so by law or unless it becomes necessary in order to protect the welfare of the individual or of the community.

"Section 10. — The honored ideals of the medical profession imply that the responsibilities of the physician extend not only to the individual, but also to society where these responsibilities deserve his interest and participation in activities which have the purpose of improving both the health and the well-being of the individual and the community."

In approving the new Principles of Medical Ethics, the House of Delegates also reaffirmed

the "Guides for Conduct for Physicians in Relationships with Institutions," adopted in 1951, and requested the Board of Trustees to devise and initiate a campaign to educate both physicians and the general public to the dangers inherent in the illegal corporate practice of medicine in its various forms.

Guides for Relations with UMWA Fund

In a key action on the basic issue of third-party intervention, as it affects the patient's free choice of physician and the physician's method of remuneration, the House adopted the "Suggested Guides to Relationships Between State and County Medical Societies and the United Mine Workers of America Welfare and Retirement Fund," which were submitted by the A.M.A. Committee on Medical Care for Industrial Workers. In approving the guides, the House also recommended that the Board of Trustees study the feasibility and possibility of setting up similar guides for relations with other third-party groups such as management and labor union plans.

The statement, which outlines both medical society and UMWA responsibilities, contains these "General Guides":

"1. All persons, including the beneficiaries of a third-party medical program such as the UMWA Fund, should have available to them good medical care and should be free to select their own physicians from among those willing and able to render such service.

"2. Free choice of physician and hospital by the patient should be preserved:

"a. Every physician duly licensed by the state to practice medicine and surgery should be assumed at the outset to be competent in the field in which he claims to be, unless considered otherwise by his peers.

"b. A physician should accept only such terms or conditions for dispensing his services as will insure his free and complete exercise of independent medical judgment and skill, insure the quality of medical care, and avoid the exploitation of his services for financial profit.

"c. The medical profession does not concede to a third party such as the UMWA Welfare and Retirement Fund in a medical care program the prerogative of passing judgment

on the treatment rendered by physicians, including the necessity of hospitalization, length of stay, and the like.

"3. A fee-for-service method of payment for physicians should be maintained except under unusual circumstances. These unusual circumstances shall be determined to exist only after a conference of the liaison committee and representatives of the Fund.

"4. The qualifications of physicians to be on the hospital staff and membership on the hospital staffs is to be determined solely by local hospital staffs and by local governing boards of hospitals."

The Medicare Program

The House considered three resolutions dealing with the federal government's Medicare program for the dependents of servicemen. The delegates adopted one resolution condemning any payments under the Medicare program "to or on behalf of any resident, fellow, intern or other house officer in similar status who is participating in a training program." Government sanction of such payments, the House declared, would give impetus to the improper corporate practice of medicine by hospitals or other nonmedical bodies. Such proposals, the House added, would violate traditional patterns of American medical practices, seriously aggravate problems of hospital-physician relationships, encourage charges by hospitals for residents' services to patients not under the Medicare program, and create a variety of additional problems in such areas as medical licensure and health insurance.

In another action on Medicare, the House recommended that the decision on type of contract and whether or not a fee schedule is included in future contract negotiations should be left to individual state determination. In this connection, however, the House restated the A.M.A. contention that: the Dependent Medical Care Act as enacted by Congress does not require fixed fee schedules; the establishment of such schedules would be more expensive than permitting physicians to charge their normal fees, and fixed fee schedules would ultimately disrupt the economics of medical practice.

The House also suggested that the A.M.A. attempt to have Medicare regulations amended to incorporate the Association's policy

that the practice of anesthesiology, pathology, radiology and physical medicine constitute the practice of medicine, and that fees for services by physicians in these specialties should be paid to the physician rendering the services.

New Statement on Medical Schools

To replace the "Essentials of an Acceptable Medical School," initially approved by the House of Delegates in 1910 and most recently revised in 1951, the House adopted a new statement entitled "Functions and Structure of a Modern Medical School." Presentation of the document followed a year of careful study by the Council on Medical Education and Hospitals in collaboration with the Association of American Medical Colleges.

The statement is intended to provide flexible guides which will "assist in attaining medical education of ever higher standards" and "serve as general but not specific criteria in the medical school accreditation program." The document encourages soundly conceived experimentation in medical education, and it discourages excessive concern with standardization.

"No rigid curriculum can be prescribed for accomplishing the objectives of medical education," it states. "On the contrary, it is the responsibility of the faculty of each school continually to re-evaluate its curriculum and to provide in accordance with its own particular setting and in recognition of advances in science a sound and well-integrated educational program."

Occupational Health Programs

The House also approved a new statement on the "Scope, Objectives and Functions of Occupational Health Programs," submitted through the Board of Trustees by the Council on Industrial Health. The Board report to the House said: "The statement describes and defines orthodox in-plant medical programs as understood in this country today and distinguishes clearly between such programs and the various plans for comprehensive medical care of the sick. It should help to resolve misunderstandings concerning the specialty of occupational medicine."

In adopting the statement, the House agreed with a reference committee report which declared that "the House has before it a statement which for the first time clearly defines the scope, objectives and functions of

occupational health programs. It marks the needs and boundaries of occupational medicine. It states in a positive fashion the proper place of occupational health programs in the practice of medicine and it clearly charts the pathways of communication between physicians in occupational health programs and physicians in the private practice of medicine."

Social Security for Doctors

Two resolutions favoring compulsory inclusion of physicians in the federal Social Security system and another one calling for a nationwide referendum of A.M.A. members on the issue were rejected by the House. The delegates reaffirmed their opposition to compulsory coverage of physicians under the Old Age and Survivors Insurance provisions of the Social Security Act. They also recommended a strongly stepped-up informational program of education which will reach every member of the Association, explaining the reasons underlying the position of the House of Delegates on this issue. The House at the same time reaffirmed its support of the Jenkins-Keogh Bills.

Miscellaneous Actions

In considering 66 resolutions and many additional reports from the Board of Trustees, councils and committees, the House also:

Congratulated the Board and the Committee on **Poliomyelitis** for their prompt action in stimulating national interest in the polio immunization program;

Recommended further study and a progressive program of action, probably including legislative changes, to solve the problem of **narcotic addiction**;

Urged a more careful screening of television and radio patent medicine **advertisements**;

Directed the Board of Trustees to investigate the indiscriminate use of stimulants such as **amphetamine**, particularly in relation to athletic programs;

Directed the Speaker to appoint a committee of five House members to study the **Heller Report**, a management survey of the Association's organizational mechanisms;

Commended the Law Department for its special report on **professional liability** and urged state and county medical societies to establish claims prevention programs and to show the new film, "The Doctor Defendant";

Opposed the establishment of any further **veterans'** facilities for the care of non-service-connected illnesses of veterans;

Condemned the compulsory assessment of medical men and staff members by hospitals in **fund-raising campaigns**;

Commended the television program, **Dr. Hudson's Secret Journal**, its producers and its star, Mr. John Howard, for an outstanding contribution to the public interest and welfare, and

Recommended payment of transportation expenses of **Section Secretaries** for A.M.A. meetings which they are required to attend.

Opening Session

At the Monday opening session Dr. Dwight Murray, retiring A.M.A. president, stressed the triple theme of the personal touch in medicine, the necessity for freedom in medical practice and the need for professional unity. Dr. Allman, then president-elect, warned against the dangers of third-part contractual agreements involving fixed fee schedules. The Goldberger Award in nutrition research was presented to Dr. Paul Gyorgy of Philadelphia. An A.M.A. citation was awarded to the Parke-Davis & Company for its continuing series of institutional advertisements telling the story of medicine and medical progress. Dr. H. G. Weiskotten, who retired after many years as chairman of the Council on Medical Education and Hospitals, received two bound volumes of letters of appreciation and also an ovation from the House of Delegates.

Inaugural Ceremony

Dr. Allman, in his Tuesday night inaugural address, declared that the physician is constantly striving for a balance between personal, human values, scientific realities and the inevitabilities of God's will. The inaugural ceremony, which was telecast over Station WABD-TV in New York, included presentation of the Distinguished Service Award to Dr. Spies and the special layman's citation to Mr. Viscardi. Also taking part in the program was the United States Army Chorus of Washington, D. C.

Election of Officers

In addition to Dr. Gundersen, the new president-elect, the following officers were selected by the House on Thursday:

Dr. Jesse Hamer of Phoenix, Ariz., vice-president; Dr. George F. Lull of Chicago, sec-

retary; Dr. J. J. Moore of Chicago, treasurer; Dr. E. Vincent Askey of Los Angeles, speaker, and Dr. Louis Orr of Orlando, Fla., vice speaker.

Four new members were elected to the Board of Trustees: Dr. George Fister of Ogden, Utah, to succeed Dr. James R. Reuling; Dr. Cleon Nafe of Indianapolis, Ind., to succeed Dr. James R. McVay; Dr. James Z. Appel of Lancaster, Pa., to replace the late Dr. Thomas P. Murdock, and Dr. Raymond McKeown of Coos Bay, Ore., to replace Dr. Gundersen. Dr. Edwin S. Hamilton of Kankakee, Ill., was elected chairman of the Board at its organizational meeting after the elections in the House.

Dr. Homer L. Pearson Jr. of Coral Gables, Fla., was renamed to the Judicial Council. Two new members were elected to the Coun-

cil on Medical Education and Hospitals: Dr. Clark Wescoe of Lawrence, Kansas, to succeed Dr. Weiskotten, and Dr. Warde B. Allan of Baltimore, Md., to succeed Dr. F. D. Murphy of Lawrence, Kansas.

For the Council on Medical Service, Dr. Robert L. Novy of Detroit, Mich., was re-elected, and Dr. Hoyt Woolley of Idaho Falls, Idaho, was chosen to replace Dr. McKeown. Dr. Warren W. Furey of Chicago was re-elected to the Council on Constitution and Bylaws.

At the Wednesday session of the House the Illinois State Medical Society made a record state society contribution to the American Medical Education Foundation by turning over \$170,450 to Dr. Louis H. Bauer of New York, foundation president.

A. A. Lampert, M.D., Delegate

REPORT OF S. D. SAMA DELEGATE

" to contribute to the welfare and education of medical students " This was the theme of the 1957 SAMA convention held at the Sheraton Hotel in Philadelphia, May 3-4-5.

Registration took place Friday morning. Later in the morning the House of Delegates assembled to consider a revision in the constitution which would extend SAMA membership through the years of residency. During the day, the standing Committee on Medical Education and Graduate Training convened. It was felt that SAMA should adopt a public relations program to make the general public more aware of the difficult situations confronting interns.

Early Saturday morning was spent in viewing the forty-three displays of the various drug companies, which were outstanding in presentation. At 11 o'clock a very informative lecture was given by C. P. Rhoads, M.D., Director of the Sloan-Kettering Institute for Cancer Research on **Rational Cancer Chemotherapy**. In the afternoon four scientific papers were presented by students of the Philadelphia medical schools. This program initiated this year, will be one of the major events of the conventions to follow. The day was brought to a close with the Third Annual SAMA Banquet. Two features of the ban-

quet were the W. W. Root Memorial Address given by Major General Silas B. Hays, M.D. Surgeon General, U. S. Army who discussed the role of the physician during his service duty, and the Student Presentation award which was given to Robert L. Klous, University of Pennsylvania School of Medicine for his paper **Studies in Proteinuria**.

Sunday, there was a panel presentation on General Practice—Specialty; Trends in Practice with Elmer Hess, M.D. past-president, American Medical Association acting as moderator.

The House of Delegates concluding session met and unanimously passed a series of changes to the by-laws which provided for a greater strength of SAMA at the local medical school level, thus bringing National SAMA and local affiliates closer together and more active.

Thusly, SAMA has prepared ". . . . its members to meet the social, moral and ethical obligations of the profession of medicine "

Respectfully submitted,
Richard M. Cribbs
University of South Dakota
School of Medicine
(Delegate)

MEDICAL LIBRARY BOOKSHELF



MEDICAL LIBRARY CONVENTION

When 478 medical librarians from all parts of the country gather together in New York City for a convention, that is an important event.

One of the highlights of the convention, not on the schedule, was a trip out to the Kraus Periodical Company in Manaroneck about 30 miles from New York City. We travelled in a special chartered bus through beautiful dog-wood studded Westchester County, to the warehouse where shelves were piled high with back issues of scientific journals, many from foreign countries. A building in the back contained nothing but back issues of Chemical Abstracts.

The main topic of the convention was Public Health, with the main speakers, Dr. Wilson Smillie, author of a popular textbook, *PREVENTIVE MEDICINE AND PUBLIC HEALTH*, MacMillan, 1952; Dr. George Rosen, Professor of Public Health Education at Columbia and Dr. Daniel Feldman of the Institute of Physical Medicine of the New York University Medical School.

The topic of one of the symposia of the convention was "Grant Aid for Medical School Libraries," with the chairman, Louise Darling, Medical Librarian of the University of California Biomedical Library. Previous to the convention, a questionnaire was sent to 89 medical libraries inquiring about grant aid funds that were allotted to the library. Fifty librarians reported that their schools received grants ranging from \$75,000 to \$3,500,000. The expanding research programs being carried on in our medical schools has necessitated an increase in the acquisitions of our medical libraries. In the legislation passed in Congress for grant aids for research, medical schools

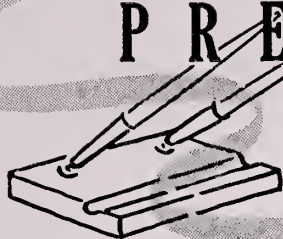
were included, but not medical libraries. Some institutions have allocated some of the money received and 20 libraries reported receiving funds ranging from \$200 to \$16,825, with five libraries receiving a percentage of all grants to their schools as overhead charges for services given investigators working on projects supported by files of journals. Faculty grantees have, in some instances, allocated part of their grants for the purchase of materials that eventually became housed in the library.

Dr. Francis Schmehl, Chief of the Health Research Facilities branch of the National Institutes of Health, stated that to date, because of an outdated idea that education was not germane to research, federal grants to medical schools have been for research only. There are bills pending in both the House and Senate to provide funds for aiding medical schools to build additional research and teaching facilities which would include libraries. Federal aid would be limited to 50 per cent construction costs matched by the local school. Helen Crawford, Medical Librarian at the University of Wisconsin stated that their problem was one of space and that this legislation would make it possible to expand their library to house the added materials needed for the research programs. The Medical Library Association went on record as favoring this legislation.

The American Public Health Association has published a second edition (1956) of *Diagnostic Procedures for Virus and Rickettsial Diseases* which should provide a working guide for those not too familiar with virology

(Continued on Page 264)

P R E S I D E N T ' S P A G E



Summer is here, and with it the opportunity to relax and enjoy life. A doctor's life is busy and frequently we forget to take time to relax. The smart doctor takes a winter vacation to "get away from it all" and then utilizes breaks in the summer season to enjoy shorter periods of fun.

Don't sell our own South Dakota short on recreational opportunities. Our Northeastern lakes, our Missouri River development, the Black Hills, yes, even the golf courses make it possible to leave the telephone behind for an hour or two or a day or two.

Relaxation is good for doctors as well as the patients we offer the same advice. Try some, it helps.

Yours sincerely,

M. M. Morrissey, M.D.



THE MONTH IN WASHINGTON

The 85th Congress is in the final weeks of its first session with prospects that it will enact few major medical bills this year, but that next year will be a different story. On at least half a dozen important measures action has been postponed, with the understanding that the issues will be fought out in 1958.

Circumstances prevented any delay on one bill that is of considerable importance to the younger doctors — a new version of the doctor draft act. It had to be enacted by July 1, the Defense Department insisted, or not enough doctors would be available to maintain the military medical services at an acceptable level.

The problem is that the Armed Forces require a higher ratio of physicians to troops than exists between physicians and the general population. Without some special law, the services would either have to make out with fewer doctors than they say they need, or draft thousands of non-physicians merely to obtain the doctors who are in the particular age groups.

This scheme was devised: Amendment of the regular draft act to allow the call up, to age 35, of the necessary numbers of doctors from among those who had received educational deferments; they could be called because they are physicians, not because they are of a certain age. Also, the national, state and local Medical Advisory Committees of Selective Service would be continued, as would a number of provisions in the original act that protect the rights of drafted doctors.

As Congress moved toward adjournment, prospects also were that it would enact a bill

to help out some states caught in a financial squeeze because of a new act, passed last year but not scheduled to go into effect until July 1, 1957, to increase federal payments for the medical care of persons on the state-federal public assistance rolls.

Under the old system, states could use the U. S. dollars to pay directly to the individuals for their medical care, or directly to the vendors of medical service — hospitals, physicians, dentists. Many states, adopting the second plan in all or part of their counties, used the federal money to help maintain pooled funds, which support various medical care programs.

All U. S. money paid out under the new act must be used in the form of vendor payments — that is, not turned over directly to the public assistance cases. At the same time, the law as originally passed stipulated that any money received under the old plan henceforth would have to be handled as “recipient payments,” that is going directly to the persons on public assistance rolls.

A number of states thus faced the prospects of drastically revising their carefully-established medical care programs or sacrificing large amounts of federal money. Congress came to their rescue by means of a bill that would allow them to use the old money as before, yet take full advantage of the new federal program.

In the closing weeks of the session, however, two major medical bills were making little, if any progress — those for federal grants to medical colleges to build teaching facilities and for initiating a program of

health insurance for federal civilian employees.

A number of bills had been introduced on aid to medical education, representing virtually all the viewpoints in Congress and the administration, but nothing much was happening. Here one factor was the economy drive, which was not too successful in cutting the administration's health budget, yet which virtually precluded any new programs involving large appropriations.

On federal employee health insurance, these long-standing differences of opinion still blocked any compromise: Should emphasis be on basic health insurance, or on major medical (catastrophic) coverage? Should U. S. payroll deductions be permitted, or would this open the door to demands for many other payroll deductions, such as for union dues? What safeguards could be set up to prevent either the commercial insurance companies or the nonprofit organizations (union plans and Blue Cross-Shield) from gaining a dominant position?

On these two major bills — as well as on many others, sponsors were not too discouraged. Already they were making plans to press them still more vigorously next year when Congress, looking toward the fall elections, may be more responsive.

NOTES:

Doctors are asked by PHS to be on the alert for a new type A influenza strain expected to work its way into this country from the Far East. Details from state health departments.

* * *

National Library of Medicine officials were still hopeful, as the end of the session neared, that Congress would vote enough money to start constructing the library's new building next year.

* * *

For the first time the U. S. contribution to WHO this year is expected to drop to a third of the total WHO budget. In dollars, however, the U. S. share continues to go up, as the charges to other countries.

* * *

The Export-Import Bank is making long-term, low interest loans to some Central American countries to build health facilities, such as hospitals and sewage plants.

BOOK REVIEWS

Therapy of Fungus Diseases edited by Thomas H. Sternberg, M.D. and Victor D. Newcomer, M.D. has been received in the office of the Journal of Medicine.

This book is the result of an international symposium. Over 200 leading scientists participated in this meeting on the therapy of mycotic infection, presenting the results of their most recent research as well as assessments of many clinical and laboratory aspects of both superficial and deep fungus diseases. Little, Brown and Company, Toronto — Illustrated, \$7.50.

* * *

The Ciba Collection of Medical Illustrations — Frank H. Netter, M.D. For more than a decade CIBA distributed to physicians and medical students loose-leaf portfolios containing full-color illustrations of normal and pathologic anatomy painted by Dr. Frank Netter. The enthusiastic reception accorded these illustrations led eventually to the program established in 1953. CIBA made arrangements with Dr. Netter to portray, in desirable detail, the major anatomy and pathology of all the systems comprising the human organism and to devote a separate volume of THE CIBA COLLECTION OF MEDICAL ILLUSTRATIONS to each system. The books are offered as a nonprofit service to the medical profession are sold at cost of publication and distribution. Volume I — "The Nervous System" — \$7.00 — Volume II — "Reproductive System" — \$13.00 and Volume III "Digestive System" — Liver, Biliary Tract and Pancreas" — \$10.50. In the United States, copies may be obtained from the Publications Department, Ciba Pharmaceutical Products Inc., Summit, New Jersey; in other countries, please direct inquiries to the nearest Ciba office.

* * *

A Visit to the Hospital by Francine Chase — \$1.50 under the supervision of Dr. Lester L. Coleman, an ear, nose and throat surgeon who is particularly identified with psychosomatic concepts in medicine.

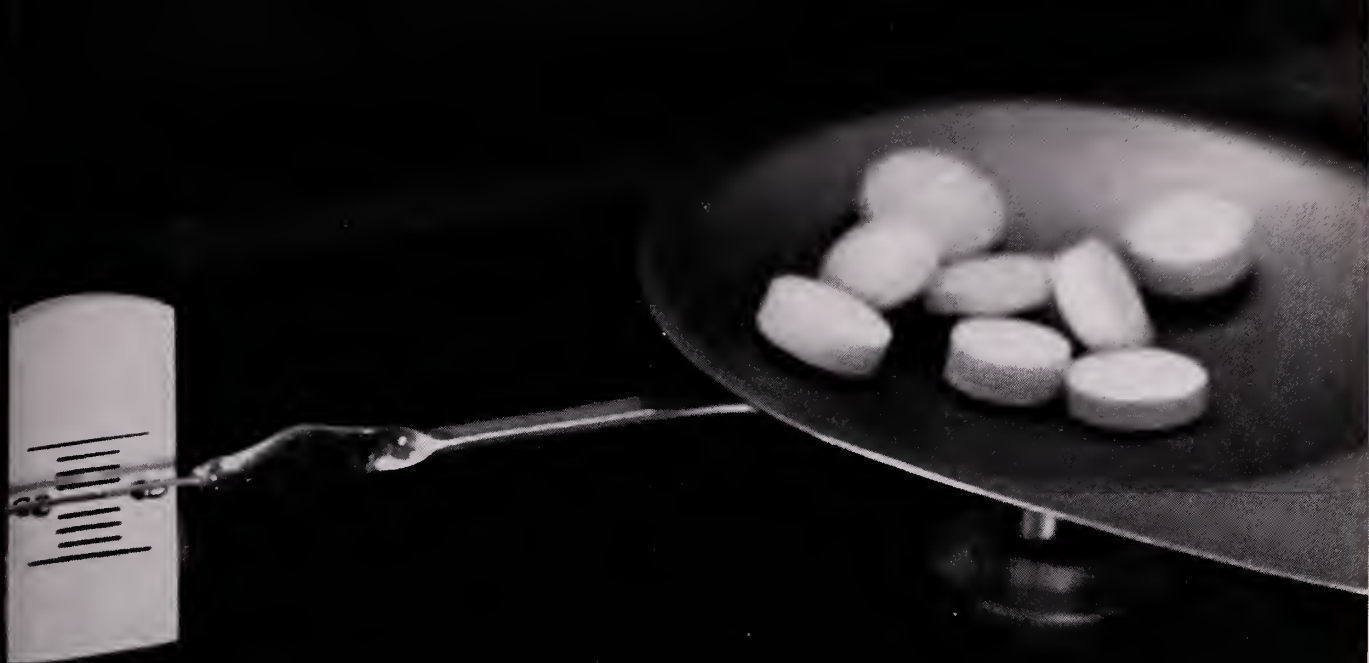
The purpose of A VISIT TO THE HOSPITAL is to allay the fears and anxieties of children who are about to undergo surgical experience in a hospital. It incorporates all

(Continued on Page 264)



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Each quarter-scored tablet contains: sulfamethoxypyridazine ... 0.5 Gm. (7½ grains).

1. Boger, W. P.; Strickland, C. S. and Gylfe, J. M.: *Antibiot. Med. Clin. Ther.* 3:378 (Nov.) 1956.

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*Reg. U.S. Pat. Off.

LEDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER, NEW YORK



MEDICAL LIBRARY BOOKSHELF—

(Continued from Page 261)

and rickettsiology but who wish to undertake diagnostic work, and also, as a reference source for those who have background and experience in these fields.

For those diseases whose casual agents have been isolated, can readily be propagated in the laboratory, and provide a satisfactory antigen, the diagnostic laboratory for serologic work contributes much of value to the everyday practice of clinical medicine and to epidemiologic investigation.

According to Dr. Lennette, who wrote the chapter on general principles underlying laboratory diagnosis of virus and rickettsial infections "Relatively few practitioners have an adequate knowledge of what material to take, how to take it, and how to submit it for viral and rickettsial examination." The chapter on rabies, for example, describes the disease, gives methods of isolation and identification of the virus, with specific directions for clinical and post mortem sources of material for testing, including packing and shipping of animal heads, spinal fluid, saliva or tissue specimens and methods of isolation and identification of the virus in the laboratory.

V. A. CONTRACT CHANGES

On July 1st the South Dakota State Medical Association and the Veterans' Administration entered into an agreement that radically changes handling of Home Town Care from procedures established over 10½ years of operation.

Long term cases will be authorized at the beginning of the fiscal year (July 1) for the entire year rather than monthly as in the past. Billing will continue monthly.

Report, authorization, and billing forms will come direct to the doctor from the V. A. Report will be submitted directly to the V. A. Billing will be accomplished as in the past directly to the Medical Association.

A letter explaining the changes in detail has been sent to every physician in the state.

BOOKREVIEWS—

(Continued from Page 263)

the psychological principles for the emotional preparation of children for surgery established by educators, psychologists and surgeons everywhere. Grosset & Dunlap Publishers, New York.

* * *

VEGETABLE OILS IN NUTRITION with special reference to unsaturated fatty acids by Dorothy M. Rathmann, Ph.D. Within the past three decades has come the realization that fats and oils are not merely sources of calories, but also have certain vital functions which cannot be performed by other classes of foodstuffs. Differences in the compositions of fats and oils, therefore, must be considered seriously in the planning of well-balanced, appetizing meals. Interest in athero-sclerosis and heart disease are further drawing unprecedented attention to the roles of fatty foods in human nutrition. This monograph is offered as a brief review of the ever-growing literature on this vital topic. Published by the Corn Products Refining Company, 17 Battery Place, New York 4, New York.

Four U. S. Army, Dependent Identification Cards (DD Form 1173) were stolen in St. Louis, Missouri on May 9, 1957.

It is believe that they may be used to gain medical care at civilian medical facilities under the Medicare program. The serial numbers of these cards are as follows:

AY 41785A**AY 41786A****AY 41787A****AY 41788A**

If these cards are presented to you contact the executive office at once.



This is your MEDICAL ASSOCIATION

DR. H. R. BROWN HEADS AMA COMMITTEE STUDYING PLAN

Dr. H. Russell Brown, Watertown, heads an AMA Committee studying medical care plans operated under lay control. The work of Dr. Brown's Committee has been described by the West Virginia Medical Journal after the groups visited in that state on UMW plans. The story, in part, follows:

"A subcommittee of the Commission on Medical Care Plans of the American Medical Association visited West Virginia early in April to study the operation of the Miner's Welfare Fund and the relationship between the Fund, the medical profession and the beneficiaries.

The Committee held a preliminary meeting at the Daniel Boone Hotel in Charleston on Sunday evening, March 31, and then continued to Beckley Memorial Hospital, a unit of the Miners' Memorial Hospital Association.

Members of the AMA subcommittee making the trip were Dr. H. Russell Brown of Watertown, South Dakota, chairman; Dr. F. J. Elias of Duluth, Minnesota; Dr. John

Conway of Clovis, New Mexico; and Dr. Leo Price of New York City.

Dr. Leonard W. Larson of Bismarck, North Dakota, chairman of the AMA Commission on Medical Care Plans, also accompanied the committee on its field trip. Doctor Larson is a member of the AMA Board of Trustees. Mr. Murray Klutch of the AMA headquarters staff, and Mr. Karl Nygren, a member of the legal firm of attorneys representing the AMA, also attended the meetings.

The Committee's field trip was made for the purpose of studying the various types of medical care plans through which beneficiaries received the services of physicians. The members of the Committee and the state physicians discussed problems in the various areas, and commented upon the spirit of co-operation between the administrators of the Fund and the medical profession.

State physicians were informed of the board scope of the Commission's study, now in its third year, and of the efforts being made to secure first-hand information which will lead to an objective

study of medical care plans in operation throughout the country.

Doctor Larson stated that he was pleased to learn of the progress being made in West Virginia in providing medical care and also said he was impressed with the professional standards apparent in the communities visited.

DISTRICTS SET FUTURE MEETINGS

Several District Medical Societies have scheduled meetings during the Summer and Fall.

Black Hills Districts has meetings August 8th at Spearfish, October 8th at Sanator, and December 12th at Deadwood.

Watertown has regular monthly meetings starting September 3rd and the first Tuesday of each month thereafter.

Brookings-Madison has a meeting at the Brookings Country Club August 8th.

Sioux Falls District will have meetings on the first Tuesday of each month starting September 3rd.

Aberdeen District has a meeting on the first Wednesday of each month starting September 4th.

S.A.M.A. HIRES PR DIRECTOR

A new position — that of public relations director — has been created by the Student American Medical Association, and William (Bill) Barr has been selected to fill it.

Announcement of the expansion program step by the 50,000 member organization which headquarters at 510 N. Dearborn Street, Chicago, was made (today) by Russell F. Staudacher, executive secretary.

Staudacher said Barr also would be managing editor of the organization's publication, **THE NEW PHYSICIAN**, and director of its Foundation program. **THE NEW PHYSICIAN** (circ. 52,106) is the only national monthly magazine speaking officially for medical students, interns and residents; the Foundation is designed to provide loans to medical students throughout the United States on a self-perpetuating basis.

NEWS NOTES

The Brookings Clinic opened its new offices officially when they held an open house Sunday, May 19.

* * *

The Aberdeen Medical Center opened its doors in May. Members of its staff are **Drs. J. M. Berbos, J. F. Cornely, F. H. Cooley, and B. F. King.**

Dr. G. S. Paulson, Rapid City, was named president of the South Dakota Heart Association at the Associations' Annual meeting in Rapid City on June 1st.

* * *

Dr. Robert Nelimark, Mitchell, was certified by the American Board of Internal Medicine at its last examining meeting in June.

* * *

Dr. Bruno E. Strauss, formerly at Veblen, S. Dak., is now located at Parker, S. Dak.

* * *

Dr. J. K. Kutnewsky, well-known to many South Dakotans as the first superintendent of Redfield State Hospital, passed away in Chicago May 30th. Dr. Kutnewsky was 99 years of age.

* * *

The Pierre District met June 12th to be the first Society to welcome new medical association president, **M. M. Morrissey, M.D.**

* * *

The 3rd District Medical Society met at the Madison Country Club June 13th for an afternoon of golf and an evening social gathering.

* * *

The 6th District Medical Society met at the Mitchell Country Club on June 13th. A discussion was held on the Fall Hunters' meeting and on medicare.

* * *

Dr. B. H. Unruh, formerly of Emery and Sioux Falls, has opened an office in Spencer, S. D.

ANNOUNCE MEDIC ESSAY CONTEST

The Trustees of America's oldest medical essay competition, the Caleb Fiske Prize of the Rhode Island Medical Society, announce as the subject for this year's dissertation "HORMONAL RELATIONSHIPS IN BREAST AND PROSTATIC CANCER — THEIR PRACTICAL APPLICATION." The dissertation must be typewritten, double spaced, and should not exceed 10,000 words. A cash prize of \$350 is offered. Essays must be submitted by December 31, 1957.

For complete information regarding the regulations write to the Secretary, Caleb Fiske Fund, Rhode Island Medical Society, 106 Francis Street, Providence 3, Rhode Island.

CRIPPLED CHILDREN SOCIETY TO MEET

The 1957 annual convention of the National Society for Crippled Children and Adults — the Easter Seal Society — will be held October 31 to Nov. 2 in Chicago's Palmer House, Dean W. Roberts, M.D., executive director, announced here today.

Prominent authorities who specialize in the rehabilitation of crippled children and adults as well as lay persons interested in non-scientific aspects of the work will participate in the three-day meeting. Speeches, seminars, workshops, clinics demonstrations will spotlight the newest techniques and latest information in the care, treatment and training of the crippled.

Delegates expected to attend the meeting will come from Easter Seal societies in the 48 states, District of Columbia, Alaska, Hawaii and Puerto Rico.

Dr. James B. Johnson, prominent Newark, Ohio, orthopedic surgeon, is chairman of the 1957 convention.

AMA HONORS PARKE-DAVIS FOR INSTITUTIONAL ADVERTISING

The American Medical Association June 3 awarded to Parke, Davis & Company a citation "for the service it has performed to the public and to the nation through its continuing series of institutional messages published in national magazines, which accurately and dramatically tell the story of medicine and medical progress."

The citation added, "because of these outstanding contributions to the public understanding of medicine, you have proved yourself deserving of this special recognition."

The citation was presented by Dr. Gunnar Gundersen of LaCrosse, Wis., chairman of the AMA board of trustees, to Harry J. Loynd of Detroit, president of the worldwide pharmaceutical firm. The presentation was made at the opening session of the House of Delegates, policy-making body of the AMA.

Dr. Gundersen said, "Parke-Davis began advertising in national magazines on behalf of the medical profession in July, 1928. Since that time, the company has published 246 advertisements, nearly all of which

have dealt with socioeconomic and health education topics.

This year, the Saturday Review's "Fifth Annual Advertising Awards" survey gave Parke-Davis a citation for its public service campaign in 1956, primarily dedicated to explaining the cost of medical care. The pharmaceutical company has consulted with representatives of the American Medical Association frequently over the years in order to present advertisements which would encourage people to make full and wise use of medical services in the United States.

"During the past 29 years, the pharmaceutical company has frequently reprinted its advertisements in single leaflet and series form, which have been much in demand by doctors and health organizations."

Dr. Gundersen continued, "the advertisements have had considerable influence on the general public and have caused national publications to single out Parke-Davis again and again for the company's distinguished advertising in the public interest."

"Parke, Davis & Company has made a substantial contribution to the public understanding of the medical professions. The advertisements created and paid for by the company have had a marked and appreciable good effect on public attitudes. The advertisements have reflected the pharmaceutical company's belief that what people think about doctors is vitally important to a sound physician-patient relation-

ship and, in turn, that what is good for the doctor and his patient is also good for the pharmaceutical industry."

Also present for the ceremony was Ralph G. Sickels of Detroit, advertising director throughout the company's unique span of 29 years of national advertising on behalf of the medical profession.

OB BOARD SETS EXAMINATIONS

Applications for certification (American Board of Obstetrics and Gynecology), new and reopened, Part I, and requests for reexamination Part II are now being accepted. All candidates are urged to make such application at the earliest possible date. Deadline date for receipt of applications is September 1, 1957. No applications can be accepted after that date.

Candidates for admission to the Examinations are required to submit with their application, an unbound 8½ x 11" typewritten list of all patients admitted to the hospitals where they practice, for the year preceding their application, or the year prior to their request for reopening of their applications. This information is to be attested to by the Record Librarian, Superintendent, or Director of the hospitals where the patients are admitted. Current Bulletins outlining present requirements may be obtained by writing to the Secretary's office.

Robert L. Faulkner, M.D.
2105 Adelbert Road
Cleveland 6, Ohio



SOUTH DAKOTA STUDENT WINS AMA CITATION

Dorothy Lundquist, 17, a high school senior from Webster, S. D., accepts her American Medical Association "first place" citation and the congratulations of Dwight H. Murray, M.D., AMA president, for her exhibit on the "Effects of Inadequate Sleep Upon Physical and Mental Alertness" displayed at the National Science Fair in Los Angeles, May 9-11.

The exhibit was one of four at the Fair selected by a special AMA judging committee as being among the best in the basic medical sciences, and the presentation of awards was made at a banquet in the Biltmore Hotel given for the 600 Fair

participants by the American Medical Association.

As one of the two "first place" winners, Dorothy was invited to be a guest exhibitor in the Scientific Exhibit of the AMA's annual Meeting in the New York City, June 3-7. The trip is part of the AMA's award, given to stimulate interest among talented students in the study of medicine as a career.

Dorothy, who has already declared her intention of studying either medicine or psychology at the University of South Dakota, comes from a medical family. Her father and mother, the Arthur L. Lundquists of 722

West Third Street, Webster, are a medical technologist and a registered nurse, respectively. Dorothy won her place in the Los Angeles competitions as a finalist in the Third Northeast South Dakota, Southwest Minnesota Science Fair in Brookings, S. D., earlier this year.

RENO SURGICAL AUGUST 22-24

The Reno Surgical Society will hold its 8th annual meeting in Reno, Nevada, August 22-24. Scheduled on the program are John B. Dillon, M.D., U of California; Francis Murphey, M.D., Stanford; Rred J. Hodges, M.D., U of Michigan; Carleton Mathewson, Jr., M.D., Stanford; Fred J. Hodges, M.D., M.D., U of Washington; O. E. Aufranc, M.D., Howard; and E. G. Holmstrom, M.D., U of Utah.

ULTRASONICS MEETING SET

Sponsored by the American Institute of Ultrasonics in Medicine, a meeting will be held at the Statler Hotel, Los Angeles, California, September 6-7, 1957. John H. Aldes, M.D., Secretary, 4833 Fountain Avenue, Los Angeles 29, California.

The meeting will cover the biological and physiological principles, as well as the clinical aspects of ultrasonics in medicine. There will also be a round table conference covering all these phases. Participating in the meeting will be representatives from Europe, South America and Japan.

PRECAUTIONS START ON ASIATIC FLU

Dr. Leroy E. Burney, Surgeon General of the Public Health Service, has established an advisory committee of physicians and health officers to consider precautionary steps in the United States against the current influenza epidemic in the Far East.

"We have already taken several precautionary measures," Dr. Burney said, "But we want to make sure that we have the best advice possible so that no protective action is overlooked."

The advisory committee met at the Department of Health, Education, and Welfare, June 10.

Epidemics in the Far East have been caused by a new strain of influenza virus which apparently is not con-

trolled by current influenza vaccine. Much of the influenza caused by the new virus has been relatively mild, marked by a 3 or 4 day period of fever and other typical flu symptoms.

No confirmed cases of the Far Eastern flu strain in the United States have been reported to the Public Health Service up to June 7th.

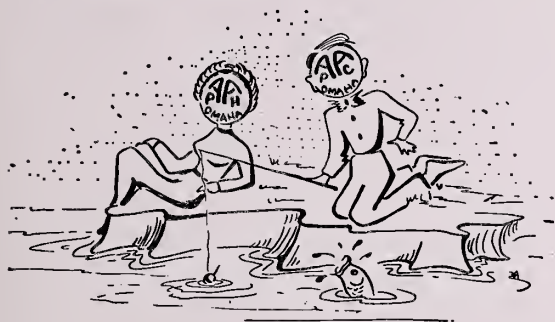
The summer months normally are the months of lowest influenza incidence in this country. The disease usually is most prevalent in the fall and winter.

Dr. Burney said the following precautionary measures have already been taken by the Public Health Service:

The Service has provided samples of the new influenza virus to manufacturers of vaccine in the U. S. Consultations with manufacturers

will be continued during the coming weeks on the possibilities of producing vaccine for general distribution if this should be indicated. Influenza vaccine has been used successfully in the past although it is sometimes ineffective against certain strains.

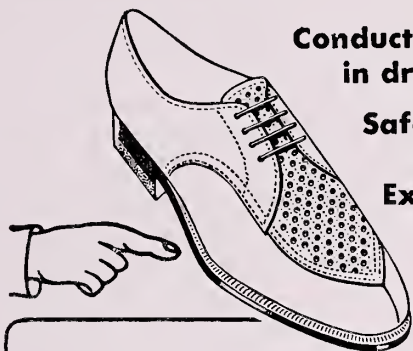
Foreign quarantine inspectors, which the Public Health Service stations at all international sea and air ports, are advising travelers from the Orient and the Philippines to see their private physicians if they develop a respiratory illness within ten days after their arrival. The names and addresses of passengers who have a respiratory illness when they arrive in the United States are forwarded to the health officers of the communities to which they are going.



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PHARMACEUTICAL

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HAROLD S. BAILEY, PH.D.

EDITOR

Division of Pharmacy
College Station, South Dakota

PHARMACEUTICAL PAPER



PROBLEMS OF PROGRESS IN PHARMACY*

by

J. H. Goodness, Ph.G., B.B.A., L.L.M.**

Boston, Massachusetts

Before we discuss the progress and the problems of pharmacy, it may be advisable to first review very briefly just what pharmacy is, for modern pharmacy is a complex organism. Today it is universally recognized that pharmacy is a profession with very definite assumed obligations. These duties revolve about the preparation of drugs which will (1) alleviate pain, (2) cure the ill, (3) preserve health, and (4) prolong life. It must also be recognized that pharmacy is not alone in the great service of preserving and bettering public health; that people other than pharmacists are also likewise engaged.

A glance at the history of pharmacy can be very helpful in creating an understanding of our present complex structure. It is for this purpose that the following major steps in the development of our profession is presented.

Pre-pharmacy Stage

During the first stage, the prepharmacy stage, each man was pretty much on his own. During illness he sought to regain health by his own skills and efforts as well as those of his family and friends. If these failed, it was not uncommon to place the sick one in some public place or by the roadside in the hope that some passing stranger might recognize

the illness and prescribe a cure. As can be imagined, this method of combating illness was not very successful. Under such conditions the life expectancy of a new born child was shorter than 30 years, or less than half the expectancy which bless the baby born in the United States today.

If a passing stranger could and did help the sick one, his services were offered as those of the good Samaritan. The sick one in his acknowledged helplessness placed his confidence in the good Samaritan who in turn exercised his curative art and his desire to serve a fellow man.

This stage of pharmacy has long since passed into antiquity, but its spirit still forms the very basis of pharmacy service today.

Birth of Pharmacy

During the second stage of development, organized pharmacy had its humble beginning. The haphazard chance system of finding a cure or one who may possibly effect a cure was replaced by a regular formalized service. The medicine man replaced the good Samaritan and the sick one acquired the status of "patient." The medicine man furnished drugs and services and the patient paid for them with money or goods. It was thus that economics first became an integral part of pharmacy practice; and public health and pharmacy grew. The medicine man, with a source of income, was enabled thereby to spend his life in the practice and advance-

*Presented at the Seminar for Pharmacists, College of Pharmacy, Detroit Institute of Technology, March 24, 1955.

**Professor of Economics and Business Administration, Massachusetts College of Pharmacy.

ment of his art and the science of drugs. Humble as this beginning was it grew by the accumulation of knowledge.

Pre-Machine Age Pharmacy

During the third stage of development the doctor and the pharmacist, together, replaced the medicine man. The diversity of skills required by each and the time necessary to master and practice them made it impossible for one person to exercise both callings successfully, and thus a new profession was born. With the service of the ancient medicine man divided, it was natural that the payment of the patient for medical service and material was also divided.

It is interesting to note that although the doctor's practice is largely a thing apart from pharmacy, its success rests heavily on drugs, and that today the practice is one of "medicine."

Modern Pharmacy

During the fourth and present stage of development, the duties of pharmacy were further divided. Machines replaced many hand skills and physical tasks required to prepare drugs, and thus manufacturing and dispensing pharmacy assumed separate entities. With a division of work, such income as is derived from the patient must also be divided. If the demands of the manufacturer are equitable and not supercharged with unnecessary burdens, both pharmacist and patient have no complaint.

These four stages in the development of modern pharmacy are ample evidence of growth in structure and complexity but provide no evidence, thus far, of increased effectiveness. The questions can rightfully be asked, "Have these changes benefited mankind?" and, "Is pharmacy better pharmacy because of the changes?" The answer is an emphatic "Yes." That the answer is correct can be shown in dozens of ways: the five "specifics" (positive cures for specific diseases) of a quarter century ago have increased to a list as long as your arm and is still growing. Many once-prevalent diseases have, or are soon to join, the Dodo. But, perhaps, the most conclusive proof of success lies in the ever increasing life span of the average American. A study of U. S. Census statistics is glowing proof that pharmacy has not failed its duty to mankind.

Present day use of so-called miracle drugs has extended many lives in all age groups between infancy and old age, but the most dramatic and undeniable proof is seen in the numbers and percentages of population reaching and passing the once considered "oldsters usual age at death."

It is freely and happily admitted that this improvement in U. S. public health is not solely due to the use of drugs. We can attribute some of the benefit to such causes as:

1. Increasing use of soaps and detergents.
2. Increasing use of pesticides.
3. More meat and greater variety of food in the diet.
4. Less fatiguing work through the use of more machines in industry.
5. Increasing efficiency and availability of medical services and skills.
6. Modern drugs.

When due credit is given to each of these causes and the many unlisted causes of health improvement, it must be admitted that the majority of credit remains with modern drugs.

If more evidence were needed to prove that ever increasing benefits are conferred on mankind by pharmacy, it could be supplied, but instead we will next consider the problems this progress in pharmacy has produced for pharmacy.

Change Brings Problems

It is axiomatic that qualitative progress arises from change, and equally true that change brings problems, and also true that problems when solved bring more progress. It is thus that progress begets progress until such time as problems cannot or will not be solved, when degeneration becomes a fact.

Pharmacy has had problems in the past and they have been successfully or adequately solved. A brief glance at the origins and solutions of some of these past problems may be useful in studying those of the present day.

In the medicine man era problems were few. If the patient had no confidence in the medicine man, he patronized another or treated himself. The same problem, the lack of confidence, may arise today, and the solution today will be the same as it was then.

In the era during which pharmacy and medicine assumed separate status, a new type problem was born. While today it is admitted that certain relationships between the doctor

and the patient constitute the practice of medicine which is the prerogative of the doctor, and that certain other relationships between the pharmacist and the patient is the practice of pharmacy and the prerogative of pharmacy, the common beginning of the two professions left much in doubt for a long time. With two entities serving the patient, where one served before, the competitive "triangle" was created in both scientific and economic fields. To preserve the rights and benefits for the patient and thus for the public, the law stepped in to make the distinctions between the professions. It was thus that the law became an active and integral part of the health professions.

It was during this same era that the law also established that certain drugs could be sold by merchants. This permission was granted merchants either because neither a doctor nor pharmacist was handily available in an emergency in the locality of the merchant's establishment or because the specifically listed drugs which he could sell were relatively safe for domestic administration as family remedies. At the time, many of these home remedies were of secret composition and were made by nonprofessional persons. In order that the benefits of ownership might not be destroyed and because the use of the medicines were then safe, the law included in the list of drugs that merchants could sell, the "patents and proprietaries." In the light of then existing medical and pharmaceutical knowledge the whole class of patents and proprietaries was thought to be safe for lay selection and use. Addiction was of no concern to the law then, and the exclusion from the list, of drugs then known to be dangerous, was considered adequate safety for the public. Law has long lost its solicitude for secret formulas as property rights when public health is at stake, that is, the federal law did, but state laws still remain archaic.

Manufacturer Creates Problems

In the fourth or present era of pharmacy development, the drug manufacturer assumed a position of great importance. This importance and power has been multiplied many folds by the machine and the advancement in drug knowledge. So long as this power is used "on the square" and the professions are not deprived of the concentrated professional knowledge which the drug represents and

which the professions contributed, the public will be the gainer. If, however, a drug manufacturer should contrive by some economic coalition to eliminate the right of one or more members of the public health team, two or more "triangles" are formed and needless conflicts and problems arise. Fortunately such tactics are not numerous, but problems of another sort are more common.

With few exceptions, drug manufacturers are not professional people, and their decisions and actions are directed toward purely economic ends. This tendency is not bad in principle, for much of our U. S. material progress is directly attributable to our economic system of private enterprise and freedom of action. If, however, private economic gains are sought without regard for the consequences to the profession or the effect on the patient, corrective measures, whether in the form of legal controls or economic countermeasures must and will result.

Unlike the demand for most consumer goods, the consumer demand for drugs cannot be expanded freely. Therefore, it is possible for any manufacturer to overproduce a drug.

Next, it is common practice for a manufacturer to create a special type of private property out of every drug introduced. This is done by the use of a trade name. Again it must be emphasized that this practice is both legal and acceptable in most instances, but its misuse on me-too products is causing tremendous losses to pharmacist and patients.

Third, the manufacturer, protected in his private property, is free to package the drug he manufactures in whatever size he chooses, and to promote and market it wherever, whenever, and however he pleases, so long as the area and method is not restricted by law.

By a combination of these rights, a single manufacturer can embark upon a disruptive course and thereby force other unwilling manufacturers to follow suit. It is thus that many problems of pharmacy are created. A few of the important problems deserve attention here.

The first of these concerns the disruptive type of promotion used by a large number of manufacturers. It is a fact that in no other U. S. profession, calling, or trade is there so much deception and harm done between

parties in interest than in pharmacy. One common form of this deception can be found in almost every professional journal published, as well as in many privately issued circulars and releases. It is the false and misleading advertisements. A reading of the advertisements in our journals will reveal that many products offered to the druggist will yield from 40% to 60% "profit." The advertiser may defend this practice by calling it "trade talk" which trade talk, he says, does not mislead the pharmacist. That it does not mislead most pharmacists is true, but what effect has such advertising on the public and the lawmaker? Where do you think lies the origin of the many devastating, though unfounded, claims of excessively high prescription prices pharmacists are supposed to be collecting? Where also do the anti-fair-trade forces find their ammunition? Who is to explain to the lay readers that the 40% profit is not profit but markup, and that a sale at 40% markup produces a loss under the most usual conditions prevailing in a pharmacy prescription department.

Certainly the fault for these misleading and trouble-making advertisements does not lie with the journals, for they do not write copy. The fault lies squarely upon the advertising managers and policy makers of manufacturing concerns. The time is ripe for a reform, and it is suggested that a few managers call in their advertising men and inform them that drug products are being purchased by pharmacists not because of but in spite of their "profit" gimmick. And while "laying down the law" the advertising men may well be told to "lay off" the use of the term "ethical" when "professional" or "prescription" is intended. The practice implies that too much of pharmacy is "unethical."

The next current problem is that of too few or too large stock sizes of prescription drugs, particularly the newly introduced drugs. With the smallest commercial package available to pharmacists being 100 tablets, the drug is frequently made unavailable to the smaller pharmacy and its patients, or is a source of needless waste and higher than necessary prescription prices. It should be remembered that the business maxim that the customer pays for everything is as true in pharmacy as it is in any other business or profession.

When drugs were largely of vegetable ingredients, the pharmacist could depict the cost of the average package by stacking pennies to the height of the container. Today the "penny measure" has been replaced by dimes, quarters and larger coins. It is no longer possible to stock new drugs as they appear, "just in case." The stacks of quarters are not always retrievable, for the labels on the drugs restrict too many of them to the blind alley of "Rx use only" and end up in the "morgue" of dead products.

Substitution

The use of overly large "smallest" stock sizes produce a chain or other problems besides cost. The pharmacist may be publicly denounced as a substitutor should he supply, by agreement with the doctor, one brand of a drug for another brand of identical action. The pharmacist may lose the confidence of the patient, and sometimes his future trade, if for economic reasons it is impossible for the pharmacist to stock a particular duplicate drug. Busy doctors may be irritated by the numerous telephone calls from pharmacists seeking permission to change brands so that the patient may be served or the law satisfied. And the price of the prescription may be increased by the telephone cost and the time of the pharmacist. Certainly the prestige and self-respect of the pharmacist may suffer.

It may be well to recognize at this point, that there is substitution and substitution. Unless the term is properly qualified or explained, misunderstanding and injustice is almost inevitable. In the first place, the supplying of anything other than that directly or indirectly (as by prescription) requested is some form of substitution. It has always been so by common law. If the drug supplied is inherently different in action from that of the drug requested, the act is one of "Pharmacological Substitution." If the supplied drug has the same action as the brand drug requested, the act is one of "Economic Substitution."

Then again, an act of substitution may result in the creation of claims by private individuals for damages and is "Civil Law Substitution," or in a right of government to punish for misbehavior in principles and result in "Criminal Law Substitution" or its frequent substitute or concomitant: State

Board of Pharmacy action for endangering the public health. The state board of pharmacy does not and cannot handle matters of purely civil nature, nor will it handle entrapment cases.

The over-sized package problem and its economic, legal, and professional consequences have lead pharmacists to seek solutions which too frequently are not pleasant to the manufacturers and suppliers. The practice of listing "dead stock" and exchanging lists with pharmacists of other localities is growing among the larger prescription stores. The practice is saving money for pharmacists and keeping prescription prices at normal levels. Cooperative buying and distribution of the purchased amount is also increasing. And the increasing practice of using "please oblige" orders for single prescription amounts of a drug is growing. Under this practice, one or more pharmacists in a large city, where drug stores are concentrated, buy wholesale quantities of drugs directly from manufacturers and resell the drugs in one-prescription amounts to other pharmacists on "please oblige" interpharmacy orders. By this method of buying all substitution is avoided, losses to pharmacists is cut to a minimum or eliminated entirely, prescription prices do not have to carry the burden of dead stock losses, and the doctors are saved the trouble of answering needless telephone calls. The expense of running numerous errands is less than the buying of drugs that cannot be sold for want of prescriptions for the drugs.

Non-Drug Outlets

The last problem we shall discuss is that of the growth of drug sales in non-drug or merchant outlets. That these sales are growing in number and importance is not news.

Overproduction of trade marked drugs ("patents and proprietaries") and the existence of laws permitting merchants to sell such drugs have made the problem. The illogical and meaningless attempt by certain drug manufacturers to maintain a distinction between drugs safe for label-directed lay selection and use when sold by merchants and those drugs safe only in the hands of professional guides to health, by the means

of maintenance of the old legal term "patents and proprietaries" for the former, must for the public health be abandoned. When it is realized that about 85% of today's prescriptions are for "patents and proprietaries" and that many of these are restricted to prescription sale because of their dangerous nature, the danger to public health by leaving the ancient law on the state statute books becomes all too vivid. The "patent and proprietaries" exemption allowing anybody to sell such drugs must be brought up to date lest the legal loophole destroy the entire progress of modern pharmacy and start a decline in public health benefits. Since patents and proprietaries are already stocked by pharmacies, the mere duplication of outlets by the addition of merchant vendors does not contribute to public health.

It is disturbing to note that the attempt of pharmacy to safeguard public health by seeking an amendment to the patents and proprietaries law is diverted and clouded by irrelevant and unrelated arguments. The arguments that pharmacists are seeking to create an income producing monopoly while themselves encroaching upon the trade of other fields are pure poppycock. First the "monopoly" sought is one of information and safety and not for gain. When safety is assured the public, the gain will fall to those who earn it. And as for encroachment on the trade of other fields of endeavor by sideline sales in drug stores: pharmacy seeks no exclusive right nor shall ever possess it, for the right to sell certain merchandise is equally guaranteed to all members of society. Economic gain for the merchant and public safety are not to be weighed in the same balance. Dangerous patents and proprietaries must be returned to the doctors and pharmacists.

In conclusion it must be emphatically stated that the future of pharmacy is not dark and forbidding, nor that, in spite of the many problems that confront pharmacists, that decay of pharmacy has already set in. The answer to many problems may rest in knowing your fellow community pharmacists, for without them as friends troubles may multiply needlessly.

PHARMACEUTICAL *Paper*



YOU AND YOUR PUBLIC*
by Donald T. Meredith**
Kalamazoo, Michigan

Public relations-wise pharmacy is suffering from a chronic, longstanding case of anemia. This is further complicated by frequently occurring attacks of "foot in mouth" disease, the symptoms of which are association bickering and the habit of washing our dirty linen in public! This diagnosis is based on a long association with pharmacy and things pharmaceutical — as an apprentice, student, registered pharmacist, teacher, salesman, and customer, together with a shorter association with the study of human relations.

To be sure, pharmacy gets sporadic treatments for this condition. There is the annual transfusion known as National Pharmacy Week and occasional small injections in the form of public relations advertising campaigns by manufacturers, associations and individual pharmacists. However, in my opinion this is not enough. What's needed is a continuous daily treatment with a good hematinic. My prescription is a hematinic in the form of the application of the principles of good public relations at the local, or what the politicians like to call the "grassroots" level.

What Is Public Relations?

The term public relations means all things to all people, and there are almost as many

*Presented to the Pharmaceutical Institute, Division of Pharmacy, South Dakota State College, April 9, 1957.

**Director Trade and Guest Relations, The Upjohn Co.

definitions for the term as there are people talking or writing about it. For example, someone has said "public relations is the art of NOT treating the public like relations." That is a good quip but having once been a teacher, I like something a little more academic. The definition on which I base my thinking is this: public relations are the things we do to, first, OBTAIN and, second, RETAIN the good will of the public on whom we depend for the success of our business.

While the name public relations is fairly new, the basic principles of good public relations are old. My first contact with these principles occurred years ago when I was attending Sunday School in a small Indiana town. We frequently studied the Sermon on the Mount. In this Sermon appear some beautiful parables, a model prayer, and perhaps the most quoted, yet least applied verse in the Bible. I refer to the Golden Rule — always treat the other fellow as you would want him to treat you if your positions were reversed.

This rule is good basic public relations, and can be applied to every situation in your dealing with the publics which you contact in your business. It is an interesting sidelight to note that this same principle appears in six of the world's major religions.

Who Are Our Publics?

Since the word "publics" appear in this

definition, the use of it should have some further clarification. It is used to refer to people in groups — or groups of people with a common interest. Public relations experts will list as many as fifteen different “publics,” but not being an expert I’ll limit my discussion to four — the four most closely associated with the successful operation of a business:

- Employees
- Customers
- Professional colleagues
- Community members

Whether you employ one or 100 people, the success of your operation will depend to a large extent on these people who work for you, for they will be handling the three things most important to your business — your merchandise, your money, and your customers. To me it seems a “must” to have them on your side, handling your valuable assets in the best possible manner. A few of the areas needing attention to attain these ends should be mentioned.

Good working conditions in the form of a neat, well managed store with a professional atmosphere will develop a feeling of pride and belonging in an employee. **Proper incentive** represented by an adequate salary, vacations with pay, retirement and other insurance, and perhaps some type of bonus or incentive pay arrangement is important to every employee. **Responsibility** for one or more departments — buying, merchandising, advertising and display — will give an employee a feeling of being an important part of and important to your business. **Training** in the technique of handling your merchandise and your customers is a necessity, and the chances are you will have to be the professor.

Information on the necessity for sales and profits, what it takes to operate a store profitably and the adverse effects of small leaks and losses is necessary. In every possible way the employee should be made to realize that his future chances of getting ahead depend on your operating at a continuing, increasing profit, and that he has a stake in this. In short, treat your employees just as you wanted to be treated when you were an employee and not the boss.

Customer Relations

There seems to be a growing tendency to disregard the old platitude “the customer is always right” and revert toward the days of “let the customer beware.” Complaining customers are a nuisance, but we shouldn’t lose sight of the fact that frequent complaints indicate something wrong, either with service, merchandise, or attitude. Someone has said that “good customers don’t complain, they just don’t come back.” This should probably be altered to read that they don’t complain more than once, and if their complaint isn’t straightened out, then they don’t come back.

Fortunately, pharmacists are in an enviable position in the matter of customer confidence. You, undoubtedly, recall the Roper survey made within the last few years in which one of the questions asked was “What kind of a business man would treat a newcomer to his community fairly and squarely.” The druggist ranked first. The important problem seems to be how to retain this good will which you inherently have.

I have been unable to discover any magic formula to hold this good will. It seems that those old-fashioned phrases like courteous and pleasant treatment, fairness in the matter of pricing your merchandise, honesty with your customers, and the maintenance at all times of a professional and dignified atmosphere cannot be improved.

To me, it is very short sighted to spend a lot of money on an attractive store and on advertising to get customers into your store through the front door, then boot them out the back door into the “alley of no return” by some discourteous or dishonest act on the part of you or one of your employees.

Once again — treat your customers as you want to be treated when you yourself are a customer.

Professional Relations

In this category let’s consider both inter- and intra-professional contacts. There has been so much said about the relations with physicians that it seems almost foolish to bring it up. If your store is in a small community where the physicians are your personal friends and are in your store almost daily to match for cigars or a coke, you haven’t much of a problem. If you are in a metropolitan area, you just have to take off

the white coat and put on the old tweed and go calling on these men to acquaint them with your store and the services it provides.

Joint meetings with the other professions on both the professional and social levels have proved very profitable also. It seems most important to me that, whatever the contact, we should forget the old "pharmacy is the handmaiden to medicine" attitude and meet them on the basis of one professional man to another.

As for intra-professional relations — relations with your fellow pharmacists—it seems to me that the most important aspect is the participation in and cooperation with your professional societies on the local, district, state, and national level. Your problems are discussed, and many of your fights are won at their meetings and by their officers. Pharmacy should react like any large family: we'll have our own private quarrels among the members, but as soon as some outsider sticks his nose in, let's present a united front to put him in his place.

There is one other group who should be mentioned in this section in professional relations. I mean the pharmaceutical manufacturer and, particularly, his representative who calls on you in your stores. This fellow has been called by a lot of names, some of which cannot be used in print, so let's just speak of him as the salesman. Contrary to popular opinion, he is a human being and is just as susceptible to the Golden Rule treatment as you and I. Your cooperation with him will be repaid many times over. He will appreciate your seeing him promptly, thus giving him more time to detail his product to doctors; your giving him the opportunity to check your stock; your letting him prestock his new items; your giving him information on doctors in your area; and an occasional word of praise or "thank you" if he has done a good job.

In all your professional relations, whether they be inter or intra, you just can't go wrong if you base your actions on treating the other fellow as you would like to be treated.

Community Relations

Your community is made up of your friends, employees, customers and another group who fall into none of these categories but should be thought of as POTENTIAL customers. Your business reputation in your

community depends on two things—the way you do business and how much the public knows about you and your business. They are equally important; they go together and cannot be separated.

The first approach to the field of community relations, then, is to be sure that your business policies, practices and services are sound. Next, go after better public understanding, get to know people better and they will in turn get to know you and your store better. In a nut shell, you should first get your house in order; then, and only then, tell your story.

Most of the things discussed up to this point have been intrinsic in nature, that is, the things to do to get your house in order. The approach to community relations involves the extrinsic factors of our prescription — the things we do to tell our story.

First and most important is participation in community activities. Fund raising drives such as the Community Chest and Red Cross; youth activities such as the Boy Scouts, Girl Scouts, Y.M.C.A., 4-H clubs and school functions; service clubs and business organizations such as the Chamber of Commerce; and church activities all offer opportunities for service.

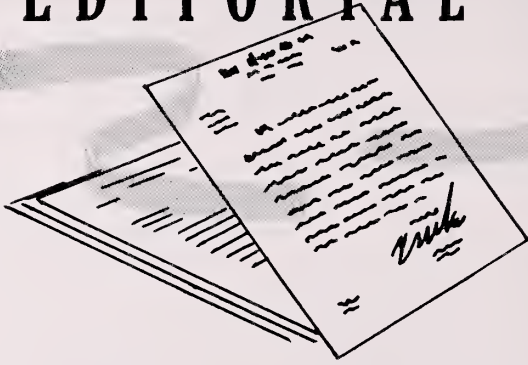
Tell Your Story

While there is no better way of getting recognition than by active participation in community projects, you can also tell your story by using what the public relations experts call tools and media. You and I are more familiar with the terms advertising, publicity and promotion. The essential difference between advertising and publicity is in the control of what is said, and how it is said. Advertising is paid for and what is printed or, in the case of radio, what is said can be completely controlled by the advertiser. Publicity you get for free, but lose control over the text. Advertising, then, might be called paid publicity and publicity, free advertising.

It's good business to make as much use of advertising as your business can afford. You can advertise your services, your merchandise and your profession. The focus of your advertising can be the physician, customer, and the community at large. You can choose the

(Continued on Page 281)

EDITORIAL PAGE



INTERPROFESSIONAL RELATIONS

Pharmacy's relations with the medical profession as far as the joint committees of the American Medical Association, American Pharmaceutical Association and National Association of Retail Druggists are concerned are on a broader level of understanding and cooperation than they have ever been, according to spokesmen of these national committees which have been meeting from time to time to consider problems of mutual interest.

The adoption of the condensed version of the Principles of Medical Ethics at the recent meeting of the House of Delegates of the American Medical Association has no bearing on future relations between the A.M.A. Pharmacy Liaison Committee and the A.Ph.A.-N.A.R.D. Committees on Relations with the Medical Profession. These committees will continue to meet for the discussion of the broader problems affecting both professions and will continue to explore avenues of cooperation between the professions, in the expectation that their conclusions will provide guide lines for the professional relations policies of their respective parent organizations and state and local groups.

What is "in the best interests of the patient," as referred to in Section 7 of the revised Principles of Ethics, will be subject to interpretation by the A.M.A.'s Judicial Council. This section reads as follows:

"Section 7. — In the practice of medicine a physician should limit the source of his professional income to medical services actually rendered by him, or under his supervision, to his patients. His fee should be commensurate with the services ren-

dered and the patient's ability to pay. He should neither pay nor receive a commission for referral of patients. Drugs, remedies or appliances may be dispensed or supplied by the physician provided it is in the best interests of the patient."

Obviously, situations will arise in different localities which may result in variable interpretations. For example, it may be in the best interests of a patient in a rural state with no pharmacy available within many miles of the patient's home to have essential drugs dispensed by the attending physician, whereas such a necessity does not exist in an urban area where a patient should have the same right of free choice of pharmacist to fill his prescriptions as he has to select his physician.

It should be noted that the Joint Committees of the A.M.A. and the pharmaceutical associations have continually stressed the importance of cementing professional relations at the state and local levels.

In this connection attention is called to the following resolution introduced by the New York State delegation which was adopted by the House of Delegates of the American Medical Association at its June meeting:

"Whereas, Difference in local custom and practice make it necessary for the Principles of Professional Conduct (or Ethics) of the component state societies and associations to be more specifically defined than the Principles of Medical Ethics of the American Medical Association; therefore be it

"Resolved, That in those states which have their own Principles of Professional Con-

YOU AND YOUR PUBLIC—

(Continued from Page 279)

duct (or Ethics) these Principles shall be binding upon all of the members of the state society or association providing they are not inconsistent or in conflict with the constitution and by-laws of the American Medical Association; and be it further

"Resolved, That the enforcement of the component state association's or society's Principles of Professional Conduct (or Ethics) is a function of the state medical society or association, as the case may be."

The adoption of this resolution points to the increasing importance of the efforts of state and local pharmaceutical associations to work very closely with their state and local medical societies to build up and maintain mutual understanding with respect to the professional prerogatives of medicine and pharmacy.

Dr. Frank Moudry representing the N.A.R.D. and Dr. Robert P. Fischelis, Secretary of the A.Ph.A., met with Dr. George F. Lull, Secretary of the A.M.A., in Chicago on June 13 to review the current situation which led to the issuance of the foregoing statement.

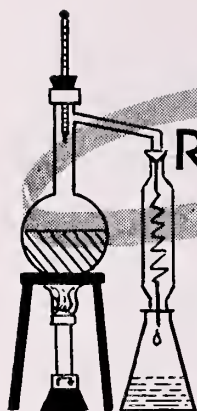
It is expected that the joint committees of the A.M.A., the A.Ph.A. and the N.A.R.D. will hold their next meeting sometime in November.

media you wish to use from newspapers, radio, direct mail, and package inserts.

In planning for a publicity program, the available media are the same as those used in advertising. Get the information to the media in the form of what are called "releases." These are short items based on some activity with which you or your store is associated. It may be a new employee, a special promotional event, an anniversary, a trip to a convention, heading a fund drive; any number of things can be news stories.

In preparing a release remember the 5 W's — Who, What, When, Where and Why. Human interest and newsworthy pictures are usually acceptable by newspapers also. Take advantage of any opportunity to speak to groups on any of the fascinating stories on pharmacy and the publicity opportunities which develop from these talks.

In the course of preparing the diagnosis and recommended treatment for the public relations anemia of pharmacy, I have tried to present some things which I sincerely believe are both good business and good for business. If they sound complicated, just remember that these objectives can be reached by the application of three pretty common things — common courtesy, common decency, and above all, common sense.



RECENT PHARMACEUTICAL *Specialties*

TRIONINE

Description: Pure crystalline triiodothyronine, the active principle of thyroid.

Indications: Trionine is particularly valuable in the treatment of hypothyroidism—with or without myxedema and cretinism. It may also be helpful in the treatment of obesity, infertility, skin disorders, hypogonadism and menstrual disorders associated with thyroid deficiency.

Trionine usually produces increased metabolic activity within 48 hours; the effect lasts 2 to 3 days. Since Trionine is a pure crystalline compound which does not require biological standardization, constant response can be expected from a given dose.

Dosage: The recommended dose is 25 to 100 micrograms a day, depending on the patient's response. The usual precautions in thyroid therapy should be observed.

Dosage forms: Trionine tablets are available in three forms — 50 mcg (pink), 25 mcg (yellow) and 5 mcg (green). Potency is expressed in terms of the active isomer. Fifty micrograms of Trionine are approximately equivalent to 1½ gr of desiccated thyroid or 100 mcg of l-thyroxin.

Source: Hoffmann-LaRoche.

NEOCURTASAL

Winthrop Laboratories is marketing its salt substitute, Neocurtasal, in an improved formula which places maximum emphasis on the product's salty flavor.

Potassium glutamate and glutamic acid are the two agents added to Neocurtasal to make it taste like salt. The new formulation was prompted by numerous reports indicating that patients using various salt substitutes found the food unappetizing, consumed less

food than required, and as a consequence often developed symptoms of a deficiency diet.

Neocurtasal contains, in addition to the added flavoring agents, potassium chloride, calcium silicate and potassium iodide. Supplied in two-ounce shakers and eight-ounce bottles, it looks, flows and tastes like table salt. It is also used before or during cooking and canning.

The product is indicated whenever sodium restriction is recommended in congestive heart failure, hypertension, hepatic cirrhosis, edema of pregnancy, obesity, some skin diseases, chronic lymphedema and primary dysmenorrhea.

MAXUKAL

Description: A water-clear solution of calcium kinate gluconate 53.4 per cent, the equivalent of 50 mg. of elemental calcium per cc.

Indications: Maxukal is indicated in treating hypocalcemic tetany, characterized by severe generalized muscular irritability, spasm and convulsions, resulting from conditions that interfere with calcium metabolism. The product has also been found beneficial in a wide variety of allergic disorders, such as urticaria, eczema and hay fever, as well as in numerous dermatoses.

Other indications for Maxukal are in relieving pain from muscle spasm due to lead and renal colic; preventing the occurrence of postoperative thrombo-embolic episodes in combination with oral vitamin E; for elective induction of labor; and in oozing hemorrhagic conditions.

Dosage: Recommended dosage is one to two cc. It is administered by slow intravenous injection only and has been demonstrated

in tests to have low toxicity and to be relatively non-irritating. An important characteristic is the high percentage of calcium ions made available in a small volume.

Dosage form: 2 cc. ampuls, boxes of 25.

Source: George A. Breon.

MARSILID

Description: Marsilid (iproniazid) — the psychic energizer — is now available in two new strengths: tablets of 10 mg. and 25 mg. In addition, Marsilid is available in 50 mg. tablets.

Indications: Marsilid is particularly useful in the treatment of mental depression. Since it elevates the patient's mood, its effect is the very opposite of that provided by tranquilizers. Marsilid is characterized by a feeling of normal eudaemonia (well-being) rather than abnormal euphoria.

Marsilid is indicated in the treatment of mild and severe mental depression and anorexia; also as an adjunct in rheumatoid arthritis associated with depressed psychomotor activity, and to stimulate wound healing in draining sinuses.

Dosage: Dosage should be adjusted to the individual patient's response. The daily dose should not exceed 150 mg (50 mg t.i.d.). In patients who are not hospitalized, the dose should be decreased after eight weeks to an average of 50 mg daily, or less. Side effects which may occur are reversible upon reduction of dosage or cessation of therapy.

Marsilid is contraindicated in overactive or overstimulated patients. It should not be given together with cocaine or meperidine (Demerol), and it should be discontinued before use of ether anesthesia. Marsilid is not recommended in epileptic patients; it should be used cautiously in patients with impaired kidney function to avoid accumulation.

Source: Hoffmann-LaRoche.

SPARINE IN VETERINARY MEDICINE

A fast-acting tranquilizing drug which has proved of great value in the treatment of acutely agitated persons now is being used with equal success in veterinary medicine to gain quick control of highly excitable animal patients.

The drug is Sparine, originally developed by Wyeth Laboratories for use in calming and controlling seriously disturbed mental

patients, alcoholics, and drug addicts. During the last year it has won wide acceptance from the medical profession.

In the practice of veterinary medicine, the drug removes the fear and combative attitude of highly agitated animals, quieting and controlling them without causing unconsciousness. By reducing the need for physical restraint, it facilitates the examination and treatment of the patients. It can be administered orally or by injection, and it is useful in the treatment of both large and small animals.

Clinical usage has shown that nervous, excitable and vicious animals under the influence of Sparine become quiet and more amenable to handling without showing signs of mental depression. They respond normally to feelings of hunger and thirst and retain full interest in their surroundings.

One of the drug's advantages is that it reduces the amount of anesthetic needed in veterinary surgery and thus lessens the risk associated with anesthesia, particularly in older animals and in animals with acute infections. In many cases Sparine and local anesthesia have replaced a general anesthetic with excellent results.

By calming the animal and reducing its struggling, Sparine is of particular value to veterinarians in diagnostic examinations, for it lessens the danger or injury to both the doctor and the patient. It is also helpful in keeping animals calm and manageable for X-ray examinations, dental work, and minor surgery.

In addition to its primary function, the drug minimizes self-mutilation associated with uncomfortable skin conditions and minor ear infections in which scratching is a problem. Thus it is especially valuable as adjunctive therapy in the treatment of eczema, pruritus, and otitis.

NUGESTORAL

Description: Ten to twenty per cent of all pregnancies end in abortion, representing a loss of prospective motherhood to almost one million women a year. In most instances, this fetal loss is caused by abnormal maternal environment. Nugestoral preserves pregnancy in the abortionprone patient by supplying five agents known to contribute to fetal salvage and known to create an optimal maternal environment.

These agents are: ethisterone (Progestoral) (15 mg), which is of recently renewed importance in maintaining and nourishing the conceptus; hesperidin (175 mg) and vitamin C (175 mg), which have proven their worth in habitual and threatened abortion by protecting decidual vessels through preservation of capillary integrity; vitamin K (2 mg sodium menadiol diphosphate), the value of which during pregnancy to prevent bleeding tendencies is already established, and which also prevents hemorrhagic diatheses commonly associated with habitual abortion; and vitamin E (3.5 mg dl, alphas-tocopherol acetate), usually employed as extra insurance in the nutritionally inadequate patient.

Dosage form: Nugestoral is available in boxes of 30 stripped tablets.

Source: Organon.

ZANCHOL

Description: Zanchol (brand of Florantyrone) is a stable crystalline compound with the descriptive formula gamma-oxo-gamma-(8-fluoranthene) butyric acid. It is a potent synthetic agent of low toxicity for the promotion of hydrocholeresis, and is unrelated to natural bile products.

Indications: For the medical treatment of cholecystitis, cholangitis, postcholecystectomy syndrome, biliary constipation and biliary dyskinesia. When a broader therapeutic regimen is indicated, Zanchol may be combined with antispasmodic medication.

Zanchol effects an increased flow of thin aqueous bile with a resultant flushing and drainage of the biliary tract. It exhibits a high index of therapeutic efficacy without untoward side reactions.

Dosage: Three to four tablets of 250 mg. each per day, taken with meals and at bedtime.

Because of the increased flow of bile during Zanchol therapy, the drug should not be administered in the presence of frank obstruction of the biliary tract; the presence of gallstones without obstruction, however, is not in itself a contraindication to the administration of Zanchol. During the acute stage of cholecystitis, Zanchol should be used cautiously, if at all.

Dosage form: In uncoated, unscored tablets of 20 mg. each in bottles of 100 and 1000.

Source: G. D. Searle & Co.

TRAL

Description: Tral (Hexocyclium, Abbott) is a new, quaternary ammonium salt with potent post-ganglionic blocking effect. It has the chemical name N-(beta-cyclohexyl-beta-hydroxy-beta-phenylethyl)-N'-methylpiperazine methosulfate.

Indications: Tral is indicated in those conditions where an anticholinergic effect is desired. It is useful in the management of peptic ulcer and gastrointestinal disorders associated with hyperacidity, hypermotility and in certain spastic conditions of the intestinal tract.

Dosage: The initial recommended oral therapeutic dose of Tral is 25 mg., four times a day. Preferably the medication is given before meals and at bedtime. For optimal therapeutic response without undesirable side effects, this dosage should be adjusted according to the patient's response.

Dosage forms: Filmtab Tral, 25 mg. (green), is supplied for oral administration in bottles of 100. Filmtab Tral with Phenobarbital, 25 mg. of Tral plus 15 mg. of phenobarbital (lavender), is supplied in bottles of 100.

Source: Abbott Laboratories.

PHARMACY *News*

DEAN LEBLANC RECEIVES AWARD

Dean Floyd J. LeBlanc of the Division of Pharmacy, South Dakota State College has received an award for outstanding service in pharmaceutical education.

A rare mortar and pestle trophy was presented to Dean LeBlanc by the Rexall Drug Co. William G. Kelly and Richard E. Olson of the drug firm made the presentation.

The trophy is awarded to encourage and reward exceptionally high standards of education in the field of pharmacy. It is an authentic replica of a 16th century mortar and pestle cast at Deventer in the Netherlands in 1950. Mounted on a black walnut pedestal with a plaque inscribed with Dean LeBlanc's name, the trophy also includes a brief history of the original mortar and pestle.

HAROLD JAMES STOUT

A prominent Aberdeen pharmacist Harold James Stout passed away June 5 in an Aberdeen hospital. He had been ill for several weeks.

Owner of the Stout Drug in that city, Mr. Stout graduated from the Division of

Pharmacy, SDSC, in 1923 with the Ph.G. degree. In 1938 he bought the William L. Buttz store, establishing the pharmacy that now bears his name.

Mr. Stout's funeral was held June 8 in the Episcopal Church.

STATE BOARD MEMBER HOSPITALIZED

Word was received recently that Milford Schwartz, member of the South Dakota State Board of Pharmacy for four years, has been hospitalized at the Mayo Clinic, Rochester, Minn.

Mr. Schwartz has been confined to bed for several weeks. During his absence Robert Beedle, SDSC 1951, is managing the Schwartz Pharmacy in Huron.

His many pharmacist friends in South Dakota express their regrets upon hearing of his illness and hope that he will be practicing again soon.

OUTSTANDING PHARMACY SCHOLARS HONORED

The third annual honors convocation at South Dakota State College to fete outstanding scholars was held

May 27 in the college auditorium. The State College Sigma Xi club, an affiliate of the national honorary research society, sponsored the assembly.

Certificates of superior scholarship were awarded to senior students who rank in the upper five per cent of their class in cumulative grade point average. Pharmacy seniors who received this honor included:

Douglas J. Becker,
Adrian, Minnesota
Franklyn W. Fogel,
Rosholt
Ruth A. Kohlmeyer,
Brookings
Robert J. Monroe,
Granite Falls, Minnesota
Wyman D. Rude,
Amery, Wisconsin
Mary Lou Scheurenbrand,
Mitchell

High scholarship recognition was given to those pharmacy students who rank in the upper ten percent of their class for the preceding three quarters. Pharmacy students who received this award were:

Paul R. Allen,
Owatonna, Minnesota
Merle E. Amundson,
Colton

Melvin J. Anderson,
Kennebec
Elaine L. Brown,
Scotland
Dewey L. Folkestad,
Brookings
Rodney W. Honner,
Geddes
Merlin R. Jueneman,
Adrian, Minnesota
Donalene A. Larson,
Sioux Falls
Larry B. Leighton,
Rutland
Arlene M. Lyle,
Elk Point
Rodney C. Nickander,
Madison, Minnesota
Linda K. Rames,
Amherst
Faye Stephens,
Belle Fourche
Terrie A. Teuber,
Redfield
Karen A. Thomas,
Elk Point
LaVonne M. Uthe,
Brookings
Mary B. Vande Voorde,
Chamberlain
Kenneth A. Weber,
Murdo

ALICE LOCKE SCHOLARSHIP GIVEN

The faculty of the Division of Pharmacy recently awarded the Alice Locke Memorial Scholarship to Miss Faye Stephens, junior pharmacy student from Belle Fourche, Dean Floyd J. LeBlanc announced.

The award was given to Miss Stephens on the basis of her outstanding scholarship during her two years as a student in pharmacy.

Funds for the award are made available to the Division of Pharmacy by Charles Locke, veteran South Dakota pharmacist. The

scholarship was established by Mr. Locke in memory of his wife Alice. Miss Stephens is the first recipient of the award.

SEVEN PHARMACY GRADUATES COMMISSIONED

Reserve commissions were presented to seven graduating seniors of the Division of Pharmacy in June who completed their training under the advanced Reserve Officers Training Corps program at South Dakota State College.

Presentation of the commissions took place during the commencement exercises June 3. Five of the graduates were commissioned in the army and two in the air force.

Receiving army commissions were Maurice G. Andersen, Sandstone, Minn.; Kenneth L. Fischer, Searles, Minn.; Gerald R. Martinka, New Ulm, Minn.; Robert P. McMahon, Brookings; and Perry Zenk, Wilmot.

Receiving air force commissions were Byron K. Luke, Brookings, and Virgil T. Riley, Dell Rapids.

FIFTY TAKE STATE BOARD EXAMS

A total of fifty new pharmacists was added to the profession in this area with the graduation of one of the largest senior classes in the history of the Division of Pharmacy, South Dakota State College, on June 3.

The State Board of Pharmacy written and practical examinations were given to

the graduates June 4-6. Those who had completed their internship took both exams. However, those who had not completed internship will take the practical examinations next year.

Forty-four of the graduates have accepted positions in retail pharmacies, while three will practice in hospital pharmacies, two are studying for advanced degrees and one will go into the Armed Services.

Members of the 1957 graduating class and their location are:

Maurice Andersen,
Humboldt Pharmacy,
Minneapolis
John Anderson,
Anderson-Lacey Drug,
Aberdeen
Duane Bagaas,
Weber & Judd,
Rochester, Minnesota
Charles Bassing,
Yankton Drug Co.,
Yankton
Douglas Becker,
Red Cross Drug,
Sisseton
Kermit Bollinger,
Swartz's Inc.,
Mobridge
George O. Brown,
Brown Drug,
Onawa, Iowa
Gene Buckley,
Matson Drug Store,
Brookings
Arthur Fairfield,
Madison Drug,
Madison
Kenneth Fischer,
Swedberg Drugs,
St. Peter, Minnesota
Noel Fischer,
Bockhoven Drug Store,
Clark

Marvin Foss,
University of Iowa,
Graduate School
Charles Fiberg,
Nelson Drug,
Fergus Falls, Minn.
Gerrit Heida,
Shirley Pharmacy,
Brookings
Bernard Heinz,
Daniels Pharmacy,
Aberdeen
Douglas A. Huewe,
Weber & Judd,
Rochester, Minnesota
Sybil Ingvalson,
Valentine, Nebraska
David L. Johnson,
Johnson Drugs,
Amery, Wisconsin
Keith Johnson,
Weber & Judd,
Rochester, Minnesota
Harvey L. Kack,
Rochester, Minnesota
Merwin Drug,
Minneapolis
Emanuel Kautz,
Corner Drug Co.,
Pierre
Jeannette Kent,
Toller Drug Co.,
Sioux City, Iowa
Alfred Kleinsasser,
Corkill Pharmacy,
Freeman
Paul Klufa,
Walpole Drug,
Vermillion
DuWayne Knauf,
Clinic Pharmacy,
Marshfield, Wisconsin
Ruth Kohlmeyer,
Huron
Byron Luke,
Osco Drug,
Boone, Iowa
Richard Lund,
Western Rexall Drug
Store,
Lead
Gerald Martinka,
Paulson Drug,
Fairmont, Minnesota

Robert McMahon,
Kendall's Drug Store,
Brookings
Robert Monroe,
McNeill Memorial Hos-
pital, Berwyn, Illinois
Carney Nelson,
Eastman Drug Store,
Platte
Kenneth Odell,
U. S. Armed Services
Peter Overgaard,
North Side Drug,
Albert Lea, Minnesota
Richard C. Petersen,
Bulowski Drug,
Marshall, Minnesota
Richard D. Petersen,
Payant Drug,
Faribault, Minnesota
Corinne Peterson,
Casey Drug,
Madison
E. Walter Peterson,
Toller Drug Co.,
Sioux City, Iowa
Erwin Redder,
Wheeler Drug Store,
Huron
Virgil Riley,
Bel-Air Drug,
Sioux Falls
Wyman Rude,
Desneck Drug,
St. Paul
Mary Lou Scheurenbrand,
University Hospital,
Minneapolis, Minn.
Charles Scofield,
Scofield Drug,
Cannon Falls, Minnesota
Stanley Shaw,
South Dakota State
College, Graduate
School
Ephriam Sieler,
Blue Drug & Jewelry,
Spearfish
Lloyd Simon,
East Side Pharmacy,
Austin, Minnesota
LaVonne Uthe,
Aberdeen

Marlene von Fischer,
Methodist Hospital,
Rochester, Minnesota
Oliver E. White,
Hummel Drug,
Billings, Montana
Perry Zenk,
Carl Johnson,
Morris, Minnesota

**EARL R. SERLES
MEMORIAL SCHOLAR-
SHIP AND LOAN FUND**

A proposal to establish a memorial to Dr. Earl R. Serles, veteran South Dakota pharmacist, and long-time Dean of Pharmacy at South Dakota State College and the University of Illinois was presented to the 71st annual convention of the South Dakota State Pharmaceutical Association.

The memorial would be known as the "Earl R. Serles Memorial Scholarship and Loan Fund." Administered by a permanent three-man committee, the interest from the fund would be used in the form of outright grants to worthy pharmacy students as scholarships. In addition, the principal of the fund could be used for student loans.

It was proposed that the fund be started by transferring \$1500 from the South Dakota Pharmaceutical Association Loan Fund.

A suitable plaque is to be prepared and placed in a prominent position within the Division of Pharmacy, South Dakota State College.

**GROSS NAMED
OUTSTANDING SDSC
TEACHER**

The Alfred J. Ersted Award for able and inspiring teaching at South Dakota

State College was presented May 27 to Guilford C. Gross, Professor and Head of the Department of Pharmacology, Division of Pharmacy.

The check for \$1,000 was handed to Dr. Gross by President John W. Headley at the Honors Convocation. Also cited as outstanding teachers were E. C. Berry, Head of the Bacteriology Department; Burton L. Brage, Associate Professor of Agronomy; Douglas Chittick, Associate Professor of Rural Sociology; and Helen Engebretson, Associate Professor of Mathematics.

An annual award, the \$1,000 prize is made possible by A. J. Ersted, a 1906 engineering graduate of State College who now resides in Atherton, Calif. Ersted was originally inspired to give the award by his regard for the late George Lincoln Brown, who served as dean, vice-president, acting president and president during his tenure at State College.

Gross joined the State College faculty in 1940. A graduate of Bowdle High School, he received a bachelor's degree in 1939 and a master's degree in 1940, both from State College. He was awarded the doctor of philosophy degree by the University of Florida in 1952. He is a member of the revision committee of the "United States Pharmacopeia," one of two official drug standards in this country.

BOARD OF PHARMACY AMENDS REGULATIONS

The South Dakota State Board of Pharmacy at the Brookings meeting June 5, amended the Board of Phar-

macy Regulations governing Pharmacy Interne Certificates.

Regulation 2 under Section B entitled Pharmacy Interne Certificates (see page 15, Rules and Regulations of the South Dakota State Board of Pharmacy, 1956) was amended as follows — the changed wording is printed in bold face type:

"2. Before any such qualified candidate shall take charge of a pharmacy in this state during temporary absence of the pharmacist manager, he shall apply for pharmacy interne certificate on the form supplied with his grade report. His pharmacist supervisor shall endorse such application and agree to be responsible for any pharmacy service performed by the applicant during the period for which the certificate may be issued **and provided no pharmacy interne shall be left in charge of the prescription department of any pharmacy in this state until he has gained at least six (6) months of his practical experience requirement.**"

Such regulation to be effective on and after July 1, 1958.

PHARMASCOOPS

Keith Keller of the Keller Pharmacy, Viborg, took a week's fishing trip recently into Northern Canada.

Keith Kono, buyer for the Jewett Drug Co., Aberdeen, was hospitalized for several weeks in the Veterans Administration Hospital, Sioux Falls. His brother-in-law Melvin C. Holm, Jones-Holm Drug, Redfield, visited him over Memorial Day.

Todd Martin flew to Copenhagen, Denmark, June 24. While there he was married

to a girl whom he met while in the Service. Mr. and Mrs. Martin will make their home in Rapid City where Todd works for Mills South Side Drug. During Todd's absence, Jim Swain filled in at the store.

Visitors to the Division of Pharmacy during State Boards were Dick Haisch, SDSC 1956, and Dennis Fischer, SDSC 1955. Both are with the U. S. Army Medical Corps. Haisch is stationed at Albuquerque, New Mexico, and Dennis is stationed at Camp Polk Louisiana.

BORDEN AWARDS GIVEN STUDENTS

A total of 254 senior medical students have received \$500 Borden Undergraduate Research Awards in Medicine over the past 13 years. This is reported in a new Borden Company Foundation directory which, for the first time, lists all the college and university scholarship awards and prizes sponsored by the foundation.

The awards, at 26 schools, are for senior medical students whose research as undergraduates has been deemed to be the most meritorious in their class.

The basic purpose of the program is to furnish incentive for high scholastic attainment and to dramatize the importance of such attainment. The freshman awards, begun on an experimental basis in 1956, seek to recognize at the very beginning of the college career the importance of good scholarship.

P R E S I D E N T ' S P A G E



Earlier this month you received a questionnaire from our Association Office on Malpractice suits. I hope most of you answered it. We have within the framework of our organization a Committee on Medical Defense. Its purpose is to keep our members who are being sued or threatened with Malpractice suits. It has never been an active committee because even though it is common knowledge that suits have been instituted, the Association or the Committee have been seldom, if ever, notified. I believe it is time we face this menace together with full strength and focalization of the State Medical Association. The first step in obtaining assistance must be the notification of the Committee or our Executive Secretary that a malpractice suit is pending or has been instituted.

I have on my desk a letter giving rates for malpractice coverage. Of the 48 states only Florida and California are in a higher bracket than South Dakota. This costs all of us money and reputation individually and collectively. Most insurance authorities state that more than 50% of Malpractice suits are instigated by another physician criticizing directly or by implication the previous doctor on the case. Occasionally it may be vindictive criticism, but generally it is a thoughtless remark or gesture or a mere attempt to be clever. I believe a safe rule of conduct in such situations is never to make a remark or gesture that one would not make in the presence of the original physician.

A physician being sued for malpractice is peculiarly helpless before publicity. He is accused in headlines. He is acquitted in fine print on the back page. In other words the charge is commonly accepted by many as a proof of guilt.

Let us give this problem some thought and see what our organization can do towards its solution. The first step is to return your questionnaire.

Sincerely,

M. M. Morrissey, M.D.
Pierre, South Dakota

A. P. HAWKINS, M.D.
1877-1957

Dr. A. P. Hawkins, long time resident of Waubay, died at the hospital in Webster, June 28th.

Dr. Hawkins was 79 years of age and had lived in this community for over 50 years, where he had served as a typical early day country doctor.

He served in World War I and received the rank of 1st Lieutenant. He was a member of the Brady-Monson American Legion Post; and a member of the Masonic Lodge for over 50 years.

Andrew P. Hawkins was born on October 6, 1887 to John and Ellen Hawkins in Frankford, Minn., in 1900 after which he attended the Physicians and Surgeon's College in Chicago, Ill. graduating in the spring of 1904. Following this he came to Waubay and started the practice of medicine which he continued until his health failed.

In 1905 he was united in marriage to Myrtle Baker of Minneapolis, and to this union four children were born: Lucille (Mrs. Earl Hallock) of Bellingham, Minn., James, Thomas and Lorraine, and with the exception of Mrs. Hallock, all have preceded him in death.

On June 21, 1914 he was married to Lillian Stage.

He leaves his widow, a daughter, Mrs. Earl Hallock, two brothers, Philip of Austin, Minn., and Abe of Waubay; and two adopted sons, Richard and Beno, both of Waubay.

EDWARD JOYCE, M.D.
1879-1957

Dr. Edward Joyce, Hurley, South Dakota passed away at his home July 4th. Funeral services were held at the Hurley Masonic Temple on July 7th.

Dr. Joyce, who practiced medicine here 47 years, was born in Dunlap, Ia., Nov. 19, 1879. He taught school for two years and then student at the University of Iowa. He completed his medical studies at the University of Illinois in 1909.

He married Cora M. Bagley on June 18, 1914.

For many years he was a member of the Yankton Medical District, the South Dakota Medical Association and American Medical Association.

Dr. Joyce served on the Hurley Council 26 years, two years as mayor. He was a member of the Masonic Lodge, having been awarded a 50-year jewel several years ago. He was also a 50-year member of the Order of Eastern Star.

Survivors in addition to the widow include a sister, Miss Winnie Joyce, Osceola, Ia.

T. G. FITZGIBBON, M.D.
1895-1957

Dr. Thomas Grattan FitzGibbon, Deadwood, died June 29th in a hospital in Long Beach, Calif. He was visiting with his brother, Dr. Paul FitzGibbon at Rolling Hills, Calif., and was stricken with a cerebral hemorrhage, dying shortly afterwards at the hospital.

Dr. FitzGibbon, president of the Medical staff of St. Joseph's Hospital, went to Deadwood in 1952 to practice medicine.

He was born in Sioux Falls, the son the late Mr. and Mrs. John FitzGibbon on Jan. 10, 1895 and was educated in the Sioux Falls schools. He was graduated in medicine from Creighton University, Omaha, Nebr., and interned at St. Joseph's Hospital in Omaha, Nebr. He had four years post graduate work in surgery at the Mayo Clinic in Rochester, Minn. He had contributed to medical literature a number of articles on cancer and gynecology.

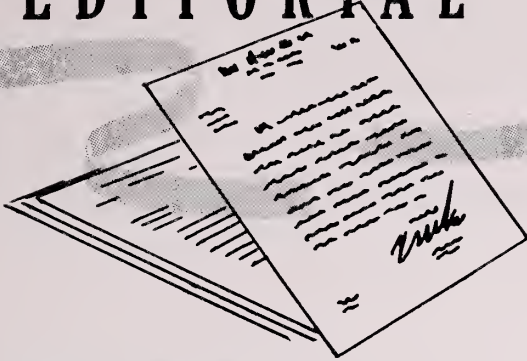
Dr. FitzGibbon served as Deadwood city physician for a number of years, and was a member of the Black Hills Medical Society.

He served in World War I, as lieutenant in a machine gun battalion after graduating from Officer's Training School, Ft. Benning, Ga. Dr. FitzGibbon also served in World War II as a major in the Medical Corps.

On June 26, 1940 he married Gertrude Joan McKenna in Sioux Falls. In addition to his wife, he is survived by two brothers, John R. FitzGibbon, Sioux Falls, and Dr. Paul FitzGibbon, Long Beach, Calif.

Funeral services were held at St. Joseph's Cathedral, Sioux Falls, and burial was in St. Michael's cemetery in Sioux Falls.

EDITORIAL PAGE



PESTICIDE SAFETY

In recent years there has been increased use of chemicals for pest control by all persons but particularly those in agriculture. Some of the materials present a threat through misuse or careless handling or storage. Proper and safe use of pesticides is part of an educational program now being sponsored by the Extension Service of South Dakota State College. Of importance to physicians is that some of the newer insecticides, cholinesterase inhibiting organic phosphates, present a particularly hazardous situation. With these compounds the time which elapses between the onset of symptoms and the receiving of proper medical attention is of great importance.

Because of the above, it would seem advisable that physicians should acquaint themselves with the latest information on pesticides and the current treatments for each specific agent. The U. S. Public Health Service has published a booklet entitled "Clinical Memoranda on Economic Poisons" and these are available to physicians upon request through the State Medical Association.

Another recent development is the establishment of Poison Information Centers throughout the United States. A physician may call one of these centers at any time of the day or night and receive information concerning poison, antidotes and treatments. Closest of these centers to South Dakota are those located at Poison Information Center of Iowa, 1200 Pleasant Street, Des Moines 14, Iowa; David N. Cook, M.D., Denver General Hospital, West 6th Avenue & Cherokee Street, Denver Colorado; and Joseph Christian, M.D., Stritch School of Medicine 706 S. Wolcott St., Chicago, Illinois.

DENTAL HEALTH

Science is taking giant steps toward the prevention of dental decay, but don't throw away your toothbrush and dental floss.

For example, two University of Wisconsin scientists have announced the discovery of a new substance, made from oat hulls, that provides effective protection to the teeth of laboratory animals when tiny amounts are added to their diet.

This oat-hull substance would seem to be the most promising development in dental health since fluoridation was introduced a dozen years ago. By drinking fluoridated water while their teeth are developing, children have less than half the usual number of tooth cavities in later life, authorities say.

This is dramatic progress. But there's more to the story.

The oat-hull substance is still in the laboratory stage, and its effectiveness and reaction on humans are still unknown.

And although tooth decay is almost universal, only about one-fifth of the nation drinks fluoridated water. Adults apparently derive no benefit at all from fluorides.

Furthermore, many individuals object to the addition of fluorides to public water supplies for reasons of religion and politics as well as health. They are opposed in this by most scientific organizations, but their arguments may slow the spread of fluoridation.

For most Americans and for many years to come, therefore, the traditional methods of oral hygiene — through brushing and the use of dental floss after every meal, a balanced diet and regular visits to your dentist — will continue to be the best way to dental health.



This is your MEDICAL ASSOCIATION

NEWS NOTES

The Brown Clinic of Watertown has moved into new quarters at 5th St., S. E. and 1st Ave. S. E. Thirty-six rooms house a staff of 5 doctors and 15 other personnel. Staff is made up of Doctors **H. Russell Brown, M. C. Rousseau, John Argabrite, John Stansky and Gerald Tracy.**

* * *

Buron Lindbloom, M.D., joined the staff of the Downtown Clinic in Pierre on July 8th. Other members of the group are Doctors **M. M. Morrissey, Charles Swanson, and R. Curtis Johraus.**

* * *

Dr. William O. Hanson has joined in practice with **Dr. G. Robert Bell** in De Smet.

* * *

John C. Foster, executive secretary of the State Medical Association has been appointed to the Advisory Committee on Public Relations to the American Medical Association. Appointment is for a three year period.

* * *

Dr. Lawrence Christianson of Fort Meade has been certified by the American Board of Internal Medicine.

Dr. George Dietz has been named to the staff of the Public Health Hospital in Sisseton.

* * *

Drs. D. A. Gregory and E. A. Johnson are building a clinic building in Milbank, of brick and concrete, the 42 x 73 building will house 8 treatment rooms, reception, minor surgery, x-ray, cast room, laboratory, diathermy room, EKG room, and storage.

* * *

Dr. Carlos Kemper, Viborg, was given a three year term on the Board of Examiners in the Basic Sciences. This is his second term on the Board.

* * *

Dr. F. F. Pfister, Webster, member of the Board of Medical Examiners since 1949, and president for many years, was reappointed for another 5 year term by Governor Joe Foss.

* * *

Dr. John W. Alexander has taken the position of Assistant pathologist at Sioux Valley Hospital in Sioux Falls. He is a former resident of Montana.

* * *

Continuation courses for physicians are being offered by the Mount Sinai Hospital

in affiliation with Columbia University with opening dates in various courses from September 9th on. Announcements may be secured from Registrar for Postgraduate Medical Instruction, Mount Sinai Hospital, Fifth Ave. and One-hundredth Street, Street, New York 29, N. Y.

* * *

Dr. R. J. Quinn, well known to most of the Medical Association, has retired to the sunny South where he now resides at 510 Cadina Ave., Coral Gables, Florida.

* * *

The Business Research Bureau of the University of South Dakota has published a booklet on "Record Keeping for Small Businesses and Other Enterprises." It is available to physicians on request from the University.

* * *

J. Nash Byrd, M.D., formerly of Pauls Valley, Oklahoma, is now associated with **Dr. Floyd U. Sebring** at Martin, S. D.

* * *

The 10th District Medical Society met at Winner on June 26th to see a film and discuss local business matters.

MEDICAL ECONOMICS TO GRANT AWARDS

The 1957 Medical Economics Award have just been announced by **Medical Economics**, the national business magazine for physicians. Top award of \$500 will go to the physician submitting the best original article during the year. Awards ranging from \$300 to \$100 will be made for other original articles written by physicians and accepted for publication.

A full article will have the best chance of winning, say the magazine's editors, if it's "limited to just one aspect of any broad subject in our field — fees, for example, or practice management, or even medical humor." It should be between 1,000 and 3,000 words long and "filled with examples, anecdotes, and cases in point drawn from actual experience."

As specified in the magazine's current issue, entries must be postmarked no later than December 31, 1957, and addressed to: Awards Editor, **Medical Economics**, Oradell, N. J. Manuscripts should be accompanied by a self-addressed envelope and return postage.

MEDICAL WRITERS SET MEETINGS

The 14th Annual Meeting, American Medical Writers' Association, will be held at the Sheraton-Jefferson Hotel, St. Louis, Sept. 27-28, under the presidency of Dean F. Smiley, B.A., M.D., Evanston, Ill., Secretary, American Association of Medical Colleges. Eighteen medical writers and authors will address this —

"The Americas' Only Association Exclusively Devoted to Improvement in the Communications of Medicine and Allied Sciences."

A Workshop on Medical Writing, conducted by full-time medical writers, will be held Sept. 28. The Speakers comprise: Richard M. Hewitt, M.D., Rochester, Minn., Senior Consultant, Section on Publications, Mayo Clinic, Co-Ordinator; Florence A. Cooksley, M.A., Washington, D. C., Free Lance Medical Manuscript Editor; Sylvia S. Covet, B.A., Minneapolis, Executive Editor, Postgraduate Medicine; Ethel H. Davis, B.A., Chicago, Free Lance Medical Manuscript Editor; Lois DeBakey, B.A., New Orleans, Medical Editor, Dept. of Medicine, Tulane University; George G. Stilwell, M.D., Rochester, Minn., Medical Editor, Mayo Clinic.

There is no charge for the meeting Sept. 27, but there is a registration fee of \$5.00 for non-members of the Association who attend the workshop on Sept. 28.

TRANQUILIZERS MAY AFFECT ARCHITECTURE

Now it's architecture that's being affected by the wide-

spread use of tranquilizing pills.

Architectural Forum magazine reports in its July issue that in at least one state the successful use of tranquilizers on mental patients "has struck a provocative blow at institutional architecture." The California legislature, the magazine reports has recommended that "major expenditures on mental hospitals be postponed" until the full effect of the new drugs on design is evaluated.

According to Forum, California's law-makers have been advised by a special committee that tranquilizing drugs have started a new trend "away from the maximum security type of facility and toward the 'normal' hospital facility."

There is now a greater need for activity rooms, more recreational and occupational therapy rooms and more outpatient and day care facilities.

Forum says the California report suggests that the future mental hospital will "very likely be composed of small units of several hundred patients and the entire structure will change, with most of the patient load going to outpatient clinics."

CALIFORNIA STATE
assignments for
PHYSICIANS AND PSYCHIATRISTS
Three Salary groups: \$11,400-\$12,600,
\$12,000-\$13,200, \$13,200-\$14,400.
Streamlined employment procedures—
interview only.

U. S. citizenship and possession of, or eligibility
for California license required.

Write:
Medical Recruitment Unit, Box A, State Personnel Board, 801 Capitol Ave., Sacramento, California.

Transactions of the South Dakota State Medical Association Seventy-Sixth Annual Session May 18, 19, 20, 21, 1957

OFFICERS, 1957-58

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M. M. Morrissey, M.D.	Pierre
President-Elect	
A. A. Lampert, M.D.	Rapid City
Secretary-Treasurer	
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Vice-President	
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AMA Delegate	
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Alternate Delegate to AMA	
A. P. Reding, M.D.	Marion
Chairman of the Council	
Magni Davidson, M.D.	Brookings
Speaker of the House	
C. R. Stoltz, M.D.	Watertown
Councilor-at-Large	
A. P. Peeke, M.D.	Volga

COUNCILORS

First District (Aberdeen)	
P. V. McCarthy, M.D. (1959)	Aberdeen
Second District (Watertown)	
J. J. Stransky, M.D. (1959)	Watertown
Third District (Madison)	
Magni Davidson, M.D. (1960)	Brookings
Fourth District (Pierre)	
L. C. Askwig, M.D. (1959)	Pierre
Fifth District (Huron)	
Paul Hohm, M.D. (1960)	Huron
Sixth District (Mitchell)	
P. P. Brogdon, M.D. (1960)	Mitchell
Seventh District (Sioux Falls)	
C. J. McDonald, M.D. (1960)	Sioux Falls
Eighth District (Yankton)	
T. H. Sattler, M.D. (1959)	Yankton
Ninth District (Black Hills)	
J. D. Bailey, M.D. (1958)	Rapid City
Tenth District (Rosebud)	
R. H. Hayes, M.D. (1958)	Winner

Eleventh District (Northwest)

G. C. Torkildson, M.D. (1958)	McLaughlin
Twelfth District (Whetstone)	
E. A. Johnson, M.D. (1958)	Milbank

STANDING COMMITTEES

1957-1958

Scientific Work

M. M. Morrissey, M.D., Chr.	Pierre
A. A. Lampert, M.D.	Rapid City
R. A. Buchanan, M.D.	Huron
A. P. Reding, M.D.	Marion

Legislation

H. Russell Brown, M.D., Chr.	Watertown
R. E. Van Demark, M.D.	Sioux Falls
E. T. Ruud, M.D.	Rapid City
Paul Bunker, M.D.	Aberdeen
C. L. Swanson, M.D.	Pierre
H. R. Lewis, M.D.	Mitchell

Publications

R. G. Mayer, M.D., Chr. (1960)	Aberdeen
R. E. Van Demark, M.D. (1958)	Sioux Falls
T. H. Sattler, M.D. (1959)	Yankton

Medical Defense

A. P. Reding, M.D., Chr. (1958)	Marion
Russell Orr, M.D. (1959)	Sioux Falls
D. R. Mabee, M.D. (1960)	Mitchell

Medical School Affairs

Medical Education and Hospitals

C. B. McVay, M.D., Chr. (1960)	Yankton
Ronald Price, M.D. (1958)	Armour
F. D. Gillis, Jr., M.D. (1958)	Mitchell
W. H. Saxton, M.D. (1959)	Huron
F. R. Williams, M.D. (1959)	Rapid City

Carl J. Sakala

Medical Economics

M. Davidson, M.D., Chr. (1958)	Brookings
Abner Willen, M.D. (1959)	Clark
R. H. Hayes, M.D. (1960)	Winner

Necrology

D. J. Glood, M.D., Chr. (1958)	Viborg
J. C. Murphy, M.D. (1960)	Murdo
J. T. Cowan, M.D. (1959)	Pierre

Public Health

R. K. Rank, M.D., Chr. (1959)	Aberdeen
F. C. Totten, M.D. (1958)	Lemmon
N. E. Wessman, M.D. (1960)	Sioux Falls

Cancer

P. V. McCarthy, M.D., Chr. (1960)	Aberdeen
W. A. Geib, M.D. (1958)	Rapid City
J. V. McGreevy, M.D. (1959)	Sioux Falls

Tuberculosis

W. L. Meyer, M.D., Chr. (1960)	Sanator
R. G. Mayer, M.D. (1958)	Aberdeen
Saul Friefeld, M.D. (1959)	Brookings

Maternal & Child Welfare

Brooks Ranney, M.D., Chr. (1959)	Yankton
L. W. Tobin, M.D. (1958)	Mitchell
W. A. Anderson, M.D. (1960)	Sioux Falls

Diabetes

E. W. Sanderson, M.D. (1958)	Sioux Falls
M. E. Sanders, M.D. (1959)	Redfield
Clifford Gryte, M.D. (1960)	Huron

Executive Committee

M. M. Morrissey, M.D., Chr.	Pierre
A. A. Lampert, M.D.	Rapid City
R. A. Buchanan, M.D.	Huron
C. R. Stoltz, M.D.	Watertown
A. P. Reding, M.D.	Marion
Magni Davidson, M.D.	Brookings

Grievance Committee

L. J. Pankow, M.D., Chr. (1962)	Sioux Falls
R. E. Jernstrom, M.D. (1958)	Rapid City
D. A. Gregory, M.D. (1959)	Milbank
A. W. Spiry, M.D. (1960)	Mobridge
D. S. Bauchman, M.D. (1961)	Madison

Mental Health

George Smith, M.D., Chr. (1960)	Sioux Falls
E. S. Watson, M.D. (1958)	Brookings
Clark Johnson, M.D. (1958)	Yankton
R. C. Knowles, M.D. (1959)	Sioux Falls
H. E. Davidson, M.D. (1959)	Lead
C. E. Baker, M.D. (1960)	Yankton

Benevolent Fund

W. E. Donahoe, M.D., Chr. (1960)	Sioux Falls
J. C. Hagin, M.D. (1958)	Miller
F. C. Totten, M.D. (1959)	Lemmon

Rheumatic Fever and Heart Disease

J. Argabrite, M.D., Chr. (1958)	Watertown
B. T. Lenz, M.D. (1959)	Huron
H. W. Farrell, M.D. (1960)	Sioux Falls

SPECIAL COMMITTEES**Radio Broadcasts & Telecasts Committee**

J. J. Stransky, M.D., Chr.	Watertown
J. P. Steele, M.D.	Yankton
J. C. Rodine, M.D.	Aberdeen
Robert Olson, M.D.	Sioux Falls
F. D. Leigh, M.D.	Huron
S. B. Simon, M.D.	Pierre
H. L. Ahrlin, M.D.	Rapid City

**American Medical
Education Foundation**

A. P. Reding, M.D., Chr.	Marion
A. A. Lampert, M.D.	Rapid City
O. J. Mabee, M.D.	Mitchell
H. L. Saylor, Jr., M.D.	Huron
S. F. Sherrill, M.D.	Belle Fourche

Editorial

R. G. Mayer, M.D., Chr.	Aberdeen
G. S. Paulson, M.D.	Rapid City
Harold Lowe, M.D.	Mobridge
H. R. Wold, M.D.	Madison
R. E. Van Demark, M.D.	Sioux Falls
T. W. Reul, M.D.	Watertown
Mary Price, M.D.	Armour
Amos Michael, M.D.	Vermillion
M. L. Spain, M.D.	Rapid City

Medical Licensure

F. F. Pfister, M.D., Chr.	Webster
Magni Davidson, M.D.	Brookings
C. E. Kemper, M.D.	Viborg

Veterans Administration & Military Affairs

L. C. Askwig, M.D., Chr.	Pierre
M. R. Gelber, M.D.	Aberdeen
G. H. Steele, M.D.	Aberdeen
T. J. Billion, M.D.	Sioux Falls

Spafford Memorial Fund

T. E. Eyres, M.D.	Vermillion
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Prepayment & Insurance Plans

C. J. McDonald, M.D., Chr.	Sioux Falls
D. H. Breit, M.D.	Sioux Falls
Paul Hohm, M.D.	Huron
E. A. Johnson, M.D.	Milbank
A. A. Lampert, M.D.	Rapid City
Robert Monk, M.D.	Yankton
T. H. Sattler, M.D.	Yankton

Rural Medical Service

A. P. Peeke, M.D., Chr.	Volga
G. J. Bloemendaal, M.D.	Ipswich
E. F. Kalda, M.D.	Platte

Nursing Training

J. A. Muggly, M.D., Chr.	Madison
C. L. Vogeale, M.D.	Aberdeen
G. F. Gryte, M.D.	Huron

Workmen's Compensation

J. N. Hamm, M.D., Chr.	Sturgis
H. R. Lewis, M.D.	Mitchell
R. Giebink, M.D.	Sioux Falls

Blood Banks

W. A. Geib, M.D., Chr.	Rapid City
R. L. Carefoot, M.D.	Huron
A. K. Myrabo, M.D.	Sioux Falls

Rehabilitation Committee

R. E. Van Demark, M.D., Chr.	Sioux Falls
Paul Bunker, M.D.	Aberdeen
W. A. Dawley, M.D.	Rapid City
H. L. Ahrlin, M.D.	Rapid City
Mary Schmidt, M.D.	Watertown

Press Radio Committee

R. E. Jernstrom, M.D., Chr.	Rapid City
E. A. Rudolph, M.D.	Aberdeen
Steve Brzica, M.D.	Sioux Falls

Care of the Indigent

H. P. Adams, M.D., Chr.	Huron
A. P. Peeke, M.D.	Volga
H. Russell Brown, M.D.	Watertown
F. F. Pfister, M.D.	Webster
P. V. McCarthy, M.D.	Aberdeen
E. J. Perry, M.D.	Redfield
R. F. Hubner, M.D.	Yankton
C. A. Johnson, M.D.	Lemmon

Committee on Civil Defense

L. C. Askwig, M.D., Chr.	Pierre
G. J. Bloemendaal, M.D.	Ipswich
P. V. McCarthy, M.D.	Aberdeen

Commission for Improvement of Patient Care

M. Sanders, M.D., Chr. (1957)	Redfield
C. L. Voegelé, M.D. (1958)	Aberdeen
C. F. Gryte, M.D. (1958)	Huron
J. A. Muggly, M.D. (1959)	Madison
R. A. Buchanan, M.D. (1959)	Huron

Committee on School Health

R. G. Mayer, M.D., Chr.	Aberdeen
W. A. Anderson, M.D.	Sioux Falls
M. R. Whitney, M.D.	Rapid City

Committee on Budget & Audit

A. P. Reding, M.D., Chr.	Marion
A. A. Lampert, M.D.	Rapid City
C. R. Stoltz, M.D.	Watertown

Hunters Fall Medical Meeting

W. A. Delaney, M.D., Chr.	Mitchell
H. R. Lewis, M.D.	Mitchell
L. W. Tobin, M.D.	Mitchell

Committee on Aging

Warren Jones, M.D., Chr.	Sioux Falls
J. W. Argabrite, M.D.	Watertown
M. P. Merryman, M.D.	Rapid City

PRESIDENT'S ADDRESS**A. P. Peeke, M.D., Volga**

Mr. Toastmaster, Honored Guests, Ladies and Gentlemen:

It is customary for the retiring president of the Medical Association to address the annual banquet with his "Swan Song." During my year as president, I have carried out another custom that I believe has been extremely well accepted: that of brevity in my talks to medical and other groups. This presentation will follow that custom.

I do feel it necessary to comment on a trend in medicine which may well change the whole economics of medical practice. I refer to the programs of government medicine on which we are now embarked and those which may come in the future. These programs now include Veteran's Administration Home Town Care, Military Dependents Medical Care, and Medical Care for Indigent Indians.

At the moment, these programs do not amount to a very large portion of the average doctor's income but they do set a pattern that indicates a trend to follow. Of the estimated twelve million dollars spent for doctor bills annually in South Dakota, only \$152,000.00 is processed through the "government contracting with the Medical Association" method. Add to that amount a program for indigents receiving federal and state aid and a program for government employees, as now being studied in Congress, and we may well find 10 to 15% of our income coming from this type of arrangement.

The profession can look at this trend and do one of two things: 1. We can cry "Socialized Medicine" and turn our backs on it in hopes that it will go away, or we can lend our experience and knowledge to making the procedure work, but on our terms.

In "Medicare," the medical association has taken the attitude that it is better to work with the Department of Defense to make a first-rate program operated by doctors than to have it rammed down our throats by Federal decree. We now have committees studying other governmental programs to determine the mode of participation by physicians. To me, this approach indicates maturity on the part of our membership.

This approach must be maintained toward our fledgling Blue Shield plan in the State. It may come about that health insurance for government employees will be handled as a Blue Shield — Blue Cross operation. Although the medical profession may have differences of opinion on Blue Shield, we must remember that it is our plan, ours to make or break. Its place in the trend of medical economics may be questioned, which is our privilege, but it cannot be overlooked. We must decide its future and follow through to the objective we set.

As a profession, we must continually scrutinize our position in the public eye, and do everything to justify the high regard which the public holds for us. We must continue to improve our scientific knowledge, we must be fair and just in our charges, we must take time to improve our doctor-patient relationships, and we must continue to hold, as our principal aim, the improvement of the health of the public.

I would also like to say a word about participation in civic affairs. Many of our physicians have served and are serving as mayors, commissioners, school board members, and in other spots of civic responsibility. In too many other cases, however, the doctor considers himself above such chores. This is a mistake that all of us should make efforts

to correct. Leadership qualifications have been given our profession but we must be willing to exercise those qualities and do some leading.

These reminders of our obligation are but a few of the things that come to mind as I terminate my year as association president.

A successful year for the association cannot be attributed to one office or officer. It is the result of effort expended by many individuals. Personally, and also on behalf of the association, I would like to thank our AMA delegate and his alternate who have done an excellent job at the national level, the staff of the executive office, the editor of the Journal, the officers and councillors, and all others who have given freely of their time to make this year a success.

I think we should also mark the growth and changes in our executive office. During the year we added Blue Shield and Medicare without adding new personnel until the end of this month. As those programs grow, so shall our office. Let us not forget that the executive office is there to serve you. Call on it freely.

One change in the executive office should also be called to your attention. Mrs. Dorothy A. Weck, assistant editor of the Journal for nearly eight years, leaves this month to take up the duties of motherhood. All of you that know Dorothy will miss her efficient and cheerful handling of her job.

In closing, let me thank all of you for contributing to the success of this, our 76th Annual Meeting.

AUDITING AND APPROPRIATIONS COMMITTEE

This committee met at 3:30, Saturday afternoon with Drs. Davidson, Reding, Morrissey, and Lampert attending.

Mr. Foster explained the proposed budget and also the expenditures of the last year. Dr. Reding moved the committee accept the CPA audit. Dr. Davidson seconded the motion and it was passed.

After discussion, Dr. Morrissey moved that the committee accept the proposed budget as a pattern for expenditures for the coming year. Dr. Davidson seconded this motion and it was passed.

Dr. Davidson moved that the committee recommend to the Council that the surplus funds from the group life program be placed in a special rental and building fund. Dr. Reding seconded the motion and it was passed.

The committee adjourned at 4:15 P.M.

COUNCIL MEETING

May 18, 1957

Sheraton-Cataract Hotel

Sioux Falls, S. Dak.

The meeting of the Council was called to order by Dr. Davidson. Present were Drs. A. P. Peeke, M. M. Morrissey, F. F. Pfister, A. P. Reding, A. A. Lampert, C. R. Stoltz, P. V. McCarthy, J. J. Stransky, Magni Davidson, L. C. Askwig, C. J. McDonald, T. H. Sattler, J. D. Bailey, and E. A. Johnson.

Dr. Lampert moved that the reading of the minutes be dispensed with as they were published in the Journal. Dr. Stoltz seconded the motion, and it was carried. A report was made on the selection of the persons to receive the Distinguished Service award at the annual banquet.

Dr. Reding reported on the pay, vacation and sick leave policy. The committee agreed with all provisions of this schedule with the exception of giving Christmas bonuses. Dr. Stoltz moved that the Council accept the committees recommendations. Dr. Lampert seconded the motion. Dr. McCarthy moved to amend the motion to approve Christmas bonuses. Dr. Pfister seconded this amendment. The amendment was passed, and the original motion as amended was passed.

Dr. Sattler moved to approve the action of the Committee on Prepayment Insurance in transferring Time Insurance Plan to the Committee on Medical Economics. Dr. Lampert seconded the motion and it was carried.

The Council accepted Mr. Foster's report on the Care of the Indigent. They instructed the Standing Committee on Care of the Indigent to continue their work on this program.

Mr. Foster reported on the contract for the Home-Town Care Plan. After working with several other states on the contract, he stated that the contract is now much more satisfactory than when first submitted. Dr. Askwig moved to endorse the acceptance of the negotiations with the Veterans Administration as authorized in January. Dr. Johnson seconded the motion and it was carried.

Mr. Harold Diers spoke on the loss of time policy of his company.

Dr. Stoltz moved that report given by Mr. Diers be referred to the Committee on Medical Economics and that they report back to the Council at the September meeting for action. This motion was seconded by Dr. Stransky and it was carried.

Mr. Foster explained the AAPS essay contest and a discussion followed on whether or not to conduct this contest this year. Dr. Lampert moved that the Association follow the same pattern in sponsoring the AAPS contest and offering prizes of \$50.00, \$25.00, and \$15.00. Dr. Peeke second the motion and it was carried.

Mr. Foster explained the Medicolegal Conference that was held in January. Dr. Stoltz moved that the Council propose a biennial Medicolegal Conference and that the next conference be held in the fall of 1958; that this proposal be forwarded to the Bar Association for their approval. Dr. Lampert seconded the motion and it was carried.

Mr. Foster introduced the Interprofessional Code that was proposed at the Medicolegal Conference. Dr. Lampert moved to refer this Code to the Executive Committee for study recommendations or changes to be reported back to the Council at the September meeting. Dr. McCarthy seconded this motion and it was carried.

Mr. Foster introduced a request from the Pharmaceutical Association regarding the Medical Association's cooperation in the establishment of an Interprofessional Relations Committee. Dr. McCarthy moved that the Chairman of the Council nominate such a committee to act as a liason with the Pharmaceutical Association for the coming year to study their proposals and report back to the meeting of the Council in the fall. Dr. Stoltz seconded this motion and it was carried.

The AMA asked that the Association set up a special committee on the Aging to consider the problem and to work with the AMA on the problem.

Dr. Stoltz moved that a Special Committee on the Aging be set up and that the President appoint the members with the view that this be made a Standing Committee if the work seems to warrant it. The motion was seconded by Dr. Sattler and carried.

Mr. Foster announced the Committee on Careers in Nursing has asked for a contribution of \$50.00 to support their program of recruitment of nurses. Dr. Stransky moved that the Council make this contribution. Dr. Pfister seconded the motion and it was carried.

The Council was also asked to donate \$50.00 to a medical student to send the student to the AMA convention. Dr. Stoltz moved that this money be donated, the motion was seconded by Dr. Reding and was carried.

Mr. Carl Cummings of the Minnesota Mutual Insurance Company spoke to the Council on the life insurance plan his company has for medical students. Dr. H. R. Brown also spoke to the Council on legislative matters and on forming a new Committee on Legislation.

Dr. Peeke moved that the Council accept the CPA audit, Dr. McDonald second the motion and it was carried.

Dr. Morrissey moved that the proposed budget be accepted, Dr. McDonald second the motion and it was carried.

COMBINED OPERATING BUDGET

1956-1957

INCOME

State Dues	\$31,500.00
Annual Meeting	4,500.00
AMA Dues	11,800.00
Interest	200.00
Miscellaneous	
(collection fees, AMA,	
Journal, Reprints, Etc.)	1,200.00
Medicolegal Conference	
Group Life Premiums	24,000.00
(and dividends)	
Journal Advertising	21,000.00
Subscriptions	1,200.00
Hunters Medical Meeting	6,000.00
Salary Reimbursement from	
V.A., Blue Shield and	
Medicare	1,000.00

\$102,400.00

DISBURSEMENTS

Salary-Executive Secretary	\$9,600.00
Salary-Other	8,620.00
Social Security	280.00
Legal & Audit	800.00
Rent	300.00
Telephone & Telegraph	1,200.00
Office Supplies & Equip.	24,000.00
Dues & Subscriptions	1,250.00
Office Travel &	
Council Mtgs.	2,750.00
Executive Secretary Travel	3,500.00
Annual Meeting	3,500.00
Public Relations	1,750.00
Blue Shield	
Miscellaneous	
AMA Dues	11,800.00
Taxes	75.00
Unemployment Taxes	500.00
Postage	900.00
Legislative Expense	1,200.00
Benevolent Fund	400.00
Medical School Endowment	200.00
Ladies Auxiliary	550.00
Medicolegal Conference	
Insurance (Life)	23,000.00
Insurance	
Basic Science Board	
Investigations	500.00
Transfer to Reserve	1,000.00

Loan to N. C. Blood Bank	
Air Condition	
Hunters Meeting	4,200.00
Expense Account Journal	500.00

\$102,375.00

Dr. Morrissey moved that the surplus funds from the group life program be placed in a special rental and building fund. Dr. McDonald seconded the motion and it was carried.

A motion was made for adjournment and the meeting was duly adjourned at 7:15 P. M.

SECOND COUNCIL MEETING

South Dakota Medical Association

Sheraton-Cataract Hotel, Sioux Falls, S. Dak.

The meeting of the Council was held following the annual banquet at the Sheraton-Cataract Hotel in Sioux Falls, South Dakota, May 20, 1957.

The meeting of the Council was called to order by Dr. M. M. Morrissey, President.

Dr. Magni Davidson was re-nominated chairman by Dr. Stoltz and seconded by Dr. Sattler. Motion carried.

The following members answered Roll Call:

M. M. Morrissey, M.D.	J. J. Stransky, M.D.
A. A. Lampert, M.D.	L. C. Askwig, M.D.
A. P. Peeke, M.D.	C. J. McDonald, M.D.
A. P. Reding, M.D.	J. D. Bailey, M.D.
P. V. McCarthy, M.D.	R. H. Hayes, M.D.
C. R. Stoltz, M.D.	T. H. Sattler, M.D.

Dr. R. G. Mayer was re-nominated Editor of the South Dakota Journal of Medicine by Dr. Sattler. Motion seconded by Dr. Reding. And carried.

Dr. R. H. Hayes was elected Councillor from the Tenth District to fill the unexpired term of Dr. R. J. Quinn of Burke who resigned. Motion made by Dr. McDonald and seconded by Dr. Reding.

Motion made by Dr. Stransky and seconded by Dr. Stoltz that a contribution of \$100.00 be given to the Medical School Endowment Association in memory of Dr. William Magee, a past president of the Medical Association. Motion carried.

Motion made by Dr. McCarthy and seconded by Dr. Hayes that a letter from the Council be sent to Senator Francis Case informing him that the Medical Association is without sympathy in the action that he took in introducing Senate Bill 2072, establishing a Chiropractic Section in Medical Service Corps of the Army. Motion carried.

Motion made by Dr. Lampert and seconded by Dr. Stransky that further study be given to the Blood Bank Resolution, and that the Executive Committee report back to the Council at its September meeting if action has not already been taken by that time, and that the Executive office inform the Chairman of the Blood Bank Committee that the Association is in sympathy with them, but that further study should be made. Motion Carried.

Meeting adjourned on motion at 10:20 P. M.

FIRST HOUSE OF DELEGATES MEETING

The first meeting of the House of Delegates was called to order by Dr. Stoltz at 7:30 P. M. Mr. Foster took the roll call. Dr. A. P. Peeke, Dr. M. M. Morrissey, Dr. F. F. Pfister, Dr. A. P. Reding, Dr. A. A. Lampert, Dr. C. R. Stoltz, Dr. P. V. McCarthy, Dr. J. J. Stransky, Dr. Magni Davidson, Dr. L. C. Askwig, Dr. B. T. Lenz, Dr. C. J. McDonald, Dr. T. H. Sattler, Dr. J. D. Bailey, Dr. E. A. Johnson, Dr. M. R. Gelber, Dr. D. Fedt, Dr. G. R. Bartron, Dr. J. Anderson, Dr. H. R. Wold, Dr. C. L. Swanson, Dr. Emil Hofer, Dr. P. Hohm, Dr. E. T. Lietzke, Dr. A. Myrabo, Dr. R. Giebink, Dr. C. Stern, Dr. D. B. Reaney, Dr. R. S. Monk, Dr. E. T. Ruud, Dr. W. A. Geib, Dr. R. A. Boyce, Dr. J. N. Hamm, Dr. C. A. Johnson, Dr. R. H. Hayes, Dr. A. W. Spiry. Dr. Reaney moved that the reports of the officers

and Council not be read at the meeting because they are published in the House of Delegates Handbook. Dr. Swanson seconded this motion and it was passed.

Dr. Stoltz made the following Reference Committee appointments:

Reference Committee on Credentials

A. P. Reding, Chairman
C. L. Swanson
R. H. Hayes

Reference Committee on Officers and Councillors

D. B. Reaney, Chairman
J. D. Bailey
M. R. Gelber

Reference Committee on Resolutions and Memorials

R. Giebink, Chairman
J. A. Anderson
P. Hohn

Reference Committee on Reports of Standing Committees

W. A. Geib, Chairman
T. H. Sattler
D. Fedt
P. McCarthy
E. T. Lietzke

Reference Committee on Special Committees and Miscellaneous Business

A. Myrabo, Chairman
H. R. Wold
R. A. Boyce
G. R. Bartron
C. A. Johnson

Nominating Committee

J. N. Hamm, Chairman
J. J. Stransky
H. R. Wold
C. L. Swanson
E. A. Hofer
C. Stern
R. S. Monk
R. H. Hayes
A. W. Spiry
E. A. Johnson

Dr. Giebink introduced the following resolution.

At the April meeting of the Seventh District Medical Society the following resolution was adopted, to be introduced at the meeting of the House of Delegates of the South Dakota State Medical Association.

"Whereas the field of Medical Technology is composed of highly trained and skilled workers who are competent to discharge their duties as part of the medical team, and

Whereas other members of the medical team such as nurses, physical therapists, dietitians are afforded professional status, and

Whereas there has been an elevation of the minimum standards for the Registry of Medical Technologists to a collegiate level similar to other professional personnel recognized as part of the medical team, and

Whereas Medical Technologists (M.T.-ASCP) deserve this same professional recognition, which will greatly aid in the recruitment efforts in this profession whose members are at present in critically short supply in South Dakota, therefore be it resolved:

That the South Dakota State Medical Association recognize Medical Technologists (M.T.-ASCP) as members of a profession and that this affirmation of professional status by the House of Delegates of the South Dakota State Medical Association be sent to the Chairman of the Civil Service Commission to call his attention to the professional status of Medical Technologists as recognized by members of the Medical profession in South Dakota." Dr. Geib seconded the resolution, it was passed and referred to the Reference Committee on Special Committees and Miscellaneous Business.

Dr. Geib the following resolution.

This Resolution is introduced at the request of the Black Hills District Medical Society:

Whereas there are many members of the medical profession on Federal Service in South Dakota located at Veterans Hospitals, U.S.P.H.S. Hospitals, and Airbase Hospitals, and

Whereas a very small number of these professional colleagues have affiliated themselves with our District Medical Societies because of the relatively high dues for membership in the State Association, and

Whereas the members of the District Medical Societies would profit greatly by an opportunity for closer discussion of mutual problems with these professional colleagues, and

Whereas the benefits derived by civilian physicians from the many services offered by the office of the South Dakota State Medical Association are usually of little or no benefit to physicians in Federal Service, and

Whereas the dues of the South Dakota State Medical Association are at their current level to provide efficient services for physicians in civilian practice, therefore be it resolved:

That the Black Hill District Medical Society recommends that dues of the South Dakota State Medical Association for physicians in Federal Service be \$10.00. Dr. Gelber seconded the resolution, it was carried and referred to the Reference Committee on Special Committees and Miscellaneous Business.

Dr. Geib proposed the names of Drs. G. W. Mills and C. F. Morseman for honorary memberships. Dr. McDonald seconded the proposal and it was carried.

Dr. Stoltz read the following resolution proposed by the Colorado State Medical Association.

The following resolution is proposed for submission to the American Medical Association House of Delegates.

Whereas, the time-honored right of the American citizen freely to choose his physician from among all those available and legally qualified has contributed immeasurably to the advancement of American standards of medical care to their present world preeminence; and

Whereas, deterioration in the quality of medical care rendered has developed in systems of medical care which deny patients this traditional American right; and

Whereas, the definition of the free choice of physician in the Principles of Medical Ethics of the American Medical Association recognizes the validity of interest of a third party interjected between the patient and his choice of physician only when that third party assumes legal and financial responsibility for occupational disease or injury; and

Whereas, this House of Delegates reiterated its adherence to this free choice principle as a fundamental right of American citizens which contributes to the betterment of medical care by unanimously adopting Resolution No. 24 at the June, 1956, Chicago Session, thereby directing the Councils on Medical Service and Industrial Health to revise their published "Guiding Principles for Evaluating Management and Union Health Centers" to conform to the free choice principle; now therefore

Be it resolved: That this House of Delegates again reiterates the adherence of the American Medical Association to the principle of the free choice of physician as currently defined in the Principles of Medical Ethics as being essential to the welfare of the patient; and

Be it further resolved: That the Judicial Council is requested to caution all members of the American Medical Association that voluntary participa-

tion in systems of medical care which deny patients right of free choice of physician as so defined, other than as may be required by the mandates of law, constitutes a violation of the Principles of Medical Ethics. Dr. Myrabo moved that the resolution be introduced. This motion was seconded by Dr. Pfister, carried and referred to the Reference Committee on Special Committees and Miscellaneous Business.

Dr. Stoltz read the following resolution.

**GUIDING PRINCIPLES
IN THE CARE AND USE OF LABORATORY
ANIMALS**

1. All animals used for experimental purposes must be lawfully acquired and their retention shall be in strict compliance with Federal, state and local laws and regulations.
2. Research projects involving live animals must be approved by the directors of the laboratory. When animals are used by students for their education or the advancement of science, such work shall be done under the direct supervision of an experienced teacher or investigator.
3. It is recommended that dogs and cats not be used in experimental work when, in the judgment of the investigator, other animals equally suitable for such work are readily and economically available.
4. It is earnestly recommended that housing, care and feeding of birds and mammals be supervised by a veterinarian; that the care of other species be supervised by a biologist competent in such matters.
5. All laboratory animals must receive every consideration for their bodily comfort; they must be kindly treated, properly fed and their surroundings kept in a sanitary condition.
6. Room in which animals are to be housed shall be provided with an impervious floor, with adequate drainage, adequate light, adequate ventilation and temperature control, a separate cage for each animal (monkey, dogs, cats, and rabbits) of sufficient size to permit the animal to stand or lie in a normal position, and for dogs, an exercise space equipped with an impervious floor.
7. The food supplied to all experimental animals must be palatable, of sufficient quantity and of proper quality to maintain the animals in good health. Water supplied to animals must be clean.
8. All major operative procedures must be done under a general anesthetic; minor operative procedures may be done under local infiltration anesthesia. If the nature of the study is such as to require that the animal survive, sterile technic must be followed throughout operations on animals whose susceptibility to infection makes it necessary, as is the case with monkeys, dogs, and cats. Clean technic alone may be used in animals highly resistant to infection such as chickens and rats. If the study does not require survival, the animal must be killed in a humane manner at the conclusion of the experiment. When, for exceptional tests or investigations, it is necessary that the animals involved be not under the influence of any anesthetic or other drug, such experimentation shall be done only by persons skilled in such work and only after the project has had specific approval by the head of the department involved.
9. The postoperative care of experimental animals must be such as to minimize discomfort during convalescence. All conditions must be maintained for the animal's comfort in accordance with the practices followed in small animal hospitals or in accordance with the practices followed in human medicine and surgery. Dr. McCarthy moved that the resolution be accepted and endorsed. Dr. Swanson seconded this motion. Dr. Stern moved that the resolution be referred to the Reference Committee on Special Committees and Miscellaneous

Business. Both the original motion and the amendment were carried.

Dr. Stransky introduced the following resolution and moved that it be accepted for referral to the Reference Committee on Special Committees and Miscellaneous Business. Dr. Sattler seconded the motion and it carried.

RESOLUTION TO AMEND BY-LAWS

WHEREAS: The study of proposed state and national legislation is becoming increasingly time-consuming and important to our profession and,

WHEREAS: Present By-Laws of this Association place this burden upon a Standing Committee consisting of the Council, President, and President-Elect, and,

WHEREAS: By reason of their many duties the Council and Officers can devote only a limited amount of time to this subject, and,

WHEREAS: All activities with respect to Legislation could be more efficiently coordinated if they were directed by a Committee appointed for that purpose, but acting under the guidance of and with responsibility to the House of Delegates and the Council, therefore,

BE IT RESOLVED: That a Standing Committee on Legislation be created to accomplish the above objectives and that the By-Laws of the Association be amended to provide for this,

BE IT RESOLVED: That the composition of the proposed Standing Committee on legislation be composed of six (6) members of the Association appointed by the President from various geographic areas of the State with staggered three (3) year terms of office,

BE IT FURTHER RESOLVED: That to effect this change in the By-Laws the following amendments be enacted: A. That Chapter VI, Section I, on page 13 be amended by striking out the words "Public Policy and" appearing in line 4. B. That Chapter VII, Section 3, on page 14 be deleted and replaced with the following "Section 3, — The Committee on Legislation shall consist of six (6) members who shall serve for three year terms except that the first appointments shall be one, two and three years respectively for two members each and that these members shall be appointed from each of any six District Societies in the State. The duties of this Committee shall be to study all proposed National and State Legislation pertaining to public health and the practice of medicine, to propose legislation which it deems necessary to or in the interest of the public health and the profession, and to assist in securing the passage of such legislation. This Committee shall report to the House of Delegates annually and to the Council at its regular meetings.

Dr. Reding reported on a meeting of the Inter-professional Health Council concerning illegal practitioners. He brought up the question of financing the payment of a retainer for the lawyer to handle the legal aspects of prosecuting these cases. Dr. Swanson moved that the House of Delegates refer this proposal in regards to the reflexologists and the hiring of the retaining of a lawyer to a special committee for further investigation and report back to the House of Delegates. Dr. Geib seconded the motion.

Dr. Ruud moved to amend this motion to change the word reflexologists to all illegal practitioners. The amendment was seconded by Dr. Hayes and passed. The motion as amended was carried.

Dr. Stoltz appointed the following special committee to take up this motion: Dr. Reding, Chairman, Dr. Swanson, and Dr. J. Anderson.

The proposed budget was read by Mr. Foster. Dr. Myrabo moved that the budget be accepted as presented. Dr. Boyce seconded the motion and it was carried.

Dr. Stoltz gave the Reference Committees their instructions.

Dr. Myrabo moved that the meeting be adjourned. Meeting adjourned.

SECOND HOUSE OF DELEGATES MEETING

The second meeting of the House of Delegates was called to order at 2:15 P. M., Sunday May 19, Dr. Stoltz presiding.

Mr. Foster called the roll with the following members present. Dr. A. P. Peeke, Dr. M. M. Morrissey, Dr. F. F. Pfister, Dr. A. P. Reding, Dr. A. A. Lampert, Dr. C. R. Stoltz, Dr. P. V. McCarthy, Dr. J. J. Stransky, Dr. L. C. Askwig, Dr. B. T. Lenz, Dr. C. J. McDonald, Dr. T. H. Sattler, Dr. J. D. Bailey, Dr. R. J. Quinn, Dr. E. A. Johnson, Dr. M. R. Gelber, Dr. D. Fedt, Dr. G. R. Bartron, Dr. J. Anderson, Dr. H. R. Wold, Dr. C. L. Swanson, Dr. Emil Hofer, Dr. H. R. Lewis, Dr. E. T. Lietzke, Dr. A. Myrabo, Dr. B. B. Reaney, Dr. R. S. Monk, Dr. E. T. Ruud, Dr. W. A. Geib, Dr. R. A. Boyce, Dr. J. N. Hamm, Dr. C. A. Johnson, Dr. R. H. Hayes, Dr. A. W. Spiry.

Mr. Foster read the minutes of the last meeting. They were approved as corrected.

Dr. Hamm read the report of the Nominating Committee and moved that a unanimous ballot be cast.

President—M. M. Morrissey, M.D.

President Elect—A. A. Lampert, M.D.

Vice President—R. A. Buchanan, M.D.

Speaker of the House—C. R. Stoltz, M.D.

Councillors:

Third District—Magni Davidson, M.D.

Fifth District—P. Hohm, M.D.

Sixth District—P. P. Brogdon, M.D.

Seventh District—C. J. McDonald, M.D.

Meeting place selected for 1959 — Rapid City. Dr. Reding seconded the motion and it was passed. Dr. Pfister then tendered his resignation as President Elect. Dr. Stoltz accepted the resignation. Dr. Swanson nominated Dr. Lampert to the position of President-Elect. Dr. Wold moved that nominations cease. This motion was seconded by Dr. Ruud and carried. Dr. Hamm moved the adoption of the report of the committee. Dr. Monk seconded the motion and it was carried.

Dr. Frank Colman of Des Moines, Iowa, then spoke to the House of Delegates on national legislation.

Dr. Reaney read the report of the Reference Committee on Officers and Councillors. Dr. McDonald moved that the committee report be adopted. This was seconded by Dr. Monk and carried.

Dr. Anderson read the report of the Reference Committee on Resolutions and Memorials. Dr. Monk moved the adoption of the report. Dr. Reding seconded the motion and it was carried.

Dr. Geib read the report of the Reference Committee on Standing Committees. Dr. Geib moved the adoption of the report. Dr. Sattler seconded the motion and it was carried.

Dr. Myrabo read the report of the Reference Committee on Special Committees and Miscellaneous Business. Dr. Myrabo moved the report in its entirety be accepted. This motion was seconded by Dr. Wold and carried.

Dr. Reding read the report of the Special Committee on Support of the Basic Science Law. Dr. Reding moved the adoption of this report. Dr. Bartron seconded the motion and it was carried.

Dr. H. Russel Brown discussed the Jenkins-Koehle bill now before Congress.

Dr. Stoltz introduced the officers and councillors elected by the House of Delegates.

Dr. Stoltz administered the oath of office to President M. M. Morrissey.

Mr. Foster made a few announcements concerning the scientific sessions.

Dr. McDonald moved that the meeting adjourn. Meeting adjourned.

PRESIDENTIAL OATH OF OFFICE

I solemnly swear that I shall carry out the duties of the President of the South Dakota State Medical Association to the best of my ability. I shall strive constantly to maintain the ethics of the medical profession and to promote the public health and welfare. I shall dedicate myself and my office to improving health standards and to the task of bringing increasingly improved medical care to the people of South Dakota. I shall uphold the Constitution and by-laws of the United States and the Constitution and by laws of the AMA and the South Dakota State Medical Association. I shall champion the cause of freedom in medical practice and freedom for all my fellow Americans.

I do solemnly swear that I will discharge the duties of this office to the best of my ability, so help me God.

REPORT OF THE REFERENCE COMMITTEES CREDENTIALS COMMITTEE

A quorum was present for the meeting of the House of Delegates and the credentials of those in attendance were in order. Total registration for the convention was 523, including 253 physicians, 95 guests, 75 exhibitors, and 100 Auxiliaries.

A. P. Reding, M.D., Chr.

R. H. Hayes, M.D.

C. L. Swanson, M.D.

REPORT OF THE REFERENCE COMMITTEE ON OFFICERS AND COUNCILLORS

The Committee has read and approved the report of the President, Dr. A. P. Peeke, and wishes to commend him for the excellent manner in which the affairs of his office were attended to during the past year.

The Committee has read and recommends approval of the report of the President-Elect.

The Committee has read and recommends approval of the report of the Vice-President.

The Committee has read and recommends approval of the report of the Secretary-Treasurer.

The Committee has read and recommends approval of the report of the Speaker of the House.

The Committee has read and recommends approval of the report of the Budget and Audit Committee.

The Committee has read and approved the Statement of Operations of the General Fund of the State Medical Association.

The Committee has read and approved the report of the Executive Secretary.

The Committee has read and recommends approval of the AMA Delegate and the Alternate Delegate.

The Committee has read and approved the report of the Council.

The Committee has read and approved the report of the Councilor of the First District.

The Committee has read and approved the report of the Councilor of the Second District.

The Committee notes that no report has been filed by the Councilor of the Third District.

The Committee has read and approved the report of the Councilor of the Fourth District.

The Committee has read and approved the report of the Councilor of the Fifth District.

The Committee has read and approved the report of the Councilor of the Sixth District.

The Committee has read and approved the report of the Councilor of the Seventh District.

The Committee has read and approved the report of the Councilor of the Eighth District.

The Committee has read and approved the report of the Councilor of the Ninth District.

The Committee notes that no report has been filed by the Councilor of the Tenth District.

The Committee has read and approved the report of the Councilor of the Eleventh District.

The Committee has read and approved the report of the Councilor of the Twelfth District.

The Committee notes with regret the passing of Dr. William Magee of the 2nd District. Dr. Magee is a past president of the South Dakota State Medical Association, and the Committee highly recommends that a contribution be made in memory of Dr. Magee, if this has not already been done.

D. B. Reaney, M.D., Chr.

J. D. Bailey, M.D.

M. R. Gelber, M.D.

REPORT OF THE REFERENCE COMMITTEE ON RESOLUTIONS AND MEMORIALS

WHEREAS, the Sioux Falls District physicians and the Ladies Auxiliary members have been so thorough in making arrangements for the success of the combined meeting on our 76th Anniversary.

BE IT RESOLVED, that the South Dakota State Medical Association give its voice in appreciation and thanks to the local physicians of Sioux Falls and their wives.

WHEREAS, the management of the Sheraton Hotels have been so cooperative in providing facilities for the success of the 76th Anniversary meeting of the South Dakota State Medical Association.

BE IT RESOLVED, that the South Dakota State Medical Association extend its thanks and appreciation to the Sheraton Hotels.

WHEREAS, the Chamber of Commerce has provided excellent service in making it possible for the success of the working arrangements.

BE IT RESOLVED, That the South Dakota State Medical Association extend its thanks and appreciation to the Sioux Falls Chamber.

WHEREAS, the Argus-Leader and the four radio stations have been most cooperative in presenting the public news of the 76th annual meeting of the South Dakota Medical Association.

BE IT RESOLVED, that the South Dakota State Medical Association extend its thanks to the Sioux Falls Argus-Leader and the radio stations.

WHEREAS, the American Legion Club of Sioux Falls has provided facilities for the Stag Party contributing much to the success of the meeting and entertainment.

BE IT RESOLVED, that the South Dakota State Medical Association extend its thanks to the American Legion Club.

WHEREAS, THE MINNEHAHA COUNTRY CLUB HAS PROVIDED FACILITIES FOR ACTIVITIES AND HAS CONTRIBUTED MUCH TO THE SUCCESS OF THE MEETING.

BE IT RESOLVED, that the South Dakota State Medical Association extend its thanks to the Minnehaha Country Club.

R. Giebink, M.D., Chr.

J. A. Anderson, M.D.

P. Hohm, M.D.

REPORT OF THE REFERENCE COMMITTEE ON STANDING COMMITTEES

1. Committee on Scientific Work

Your Reference Committee congratulates the Committee on Scientific Work for the interesting and stimulating program they have arranged and recommends the adoption of their report.

I move the adoption of this portion of the report.

2. Committee on Public Policy and Legislation

Your reference committee believes the medical profession should be especially pleased with the results obtained by the Medical Association in obtaining the passage of a large number of bills they sponsored or supported, and aiding in the defeat of bills which were detrimental to the public welfare.

I move the adoption of this portion of the report.

3. Report on the Publications Committee

Your reference committee commends the Editor of the Journal, Dr. Mayer for performing his usual fine work with the Association Journal. It is gratifying to note the large number of articles contributed by South Dakota physicians.

I move the adoption of this portion of the report.

4. Report on the Committee on Medical Defense

Your reference committee believes that due to the increasing number of claims of malpractice and the high rates for insurance coverage against such suits that it would be advisable for the Council to use a questionnaire type of survey to be sent to the members of its Association so that insight may be gained into the magnitude of the problems of malpractice suits.

I move the adoption of this portion of the report.

5. Medical School Affairs Committee

Your reference committee endorse the suggestion that two student scholarships at \$100.00 each, and \$50.00 travel expense for a delegate to the SAMA be provided.

Your Committee notes with gratitude its generous contribution of \$8,000.00 by Dr. Thomas Y. Nakao to the medical school.

The Medical School should be encouraged to continue and expand its program of post graduate education for South Dakota physicians.

Your reference committee recommends the adoption of the Medical School Affairs Committee.

I move the adoption of this portion of the report.

6. Committee on Public Health

Your Committee recommends the adoption of the report.

I move the adoption of this portion of the report.

7. Subcommittee on Cancer

The policies of the South Dakota Division and its American Cancer Society are to be highly commended because of a strict established principle of seeking the advice of physicians in carry out all phases of their program. The evidence of increased public interest and awareness of cancer is in large part due to the activities of this organization. The time and effort spent by many members of the Medical Association as officers and commissioners of the State Division of the American Cancer Society is sincerely appreciated.

I move the adoption of this portion of the report.

8. Subcommittee on Tuberculosis

The effectiveness of the Subcommittee on Tuberculosis is demonstrated by their fine report.

I move the adoption of this portion of the report.

9. Committee on Maternal and Child Welfare

The Committee on Maternal and Child Welfare is to be commended for their detailed study of obstetric analgesia and anesthesia which is now in progress.

I move the adoption of this portion of the report.

10. Committee on Diabetes

Your reference committee believes that diabetes is a problem which warrants greater interest than has been shown by members of the Association.

Your reference committee recommends an increased effort to stimulate interest among the public on diabetes by your Committee on Diabetes.

I move the adoption of this portion of the report.

11. Executive Committee

Your Committee recommends the adoption of the report of the Executive Committee.

I move the adoption of this portion of the report.

12. Grievance Committee

Your reference committee notes the obvious importance of this Committee by the fine report submitted to the House of Delegates. Your reference committee recommended as required reading the entire report by the membership of the Medical Association. Your reference committee expresses the appreciation of the House of Delegates to the Chairman and Committee members for their fine work and accomplishments.

I move the adoption of this portion of the report.

13. Committee on Mental Health

Your reference committee recommends the adoption of the report of the Committee on Mental Health.

I move the adoption of this portion of the report.

14. Benevolent Fund Committee

Your reference committee calls the attention of the House of Delegates and Council to the statement of the Benevolent Fund that the original intent of the Fund shall not be discarded, but that the Fund is presently being used for loan for needy medical students. Your committee recommends the adoption of the report of the Benevolent Fund Committee.

I move the adoption of this portion of the report.

15. Rheumatic Fever Committee

Your reference committee recommends the adoption of the Rheumatic Fever Committee.

I move the adoption of this portion of the report.

I move the adoption of the Report of the Reference Committee on Reports of Standing Committees as a whole.

W. A. Geib, M.D., Chr.
T. H. Sattler, M.D.
D. Fedt, M.D.
P. V. McCarthy, M.D.
E. T. Lietzke, M.D.

REPORT OF THE REFERENCE COMMITTEE ON SPECIAL COMMITTEES AND MISCELLANEOUS BUSINESS

The Committee approves the report of the Radio Broadcasts Committee and recommends in view of the increasing use of television, the change in name to Radio Broadcasts and Telecasts Committee.

The Committee moves the adoption of the report of the AMEF Committee.

The Committee moves the adoption of the report of the Editorial Committee and recommends that a letter of commendation be written by the Executive Secretary to Dorothy Anderson Weck.

The Committee moves the adoption of the report of the Committee on Medical licensure.

The Committee moves the adoption of the report of the Committee on Veterans Administration and Military Affairs.

The Committee moves the adoption of the report of the Committee on the Spafford Memorial Fund.

The Committee moves the adoption of the report of the Committee on Prepayment and Insurance Plans.

The Committee has read, approved, and recommends the adoption of the resolution to amend the By-Laws thereby affecting a Standing Committee on Legislation of six members.

The Committee moves the adoption of the report of the Committee on National Legislation, recommending elimination of the committee and further recommends that appropriate budget items be allocated to the Standing Committee on Legislation.

The Committee moves the adoption of the report of the Committee on Rural Medical Service.

The Committee moves the adoption of the report of the Committee on Nursing Training.

The Committee moves the adoption of the report and recommendations of the Committee on Workmen's Compensation.

The Committee moves the adoption of the report and especially the recommendations of the Committee on Blood Banks, special note being given to the appropriation of \$1,500.00 each year to the two year program as outlined.

The Committee moves the adoption of the report of the Committee on Rehabilitation.

The Committee moves the adoption of the report of the Committee on Press Radio Code.

The Committee moves the adoption of the report and recommendations of the Committee on Care of the Indigent.

The Committee moves the adoption of the report and recommendations of the Committee on Coroner's Law.

The Committee moves the adoption of the report and recommendations of the Committee on School Health.

As no report of the Committees on Civil Defense and for improvement of patient care is made, it is felt by the committee that information should be given relative to work done by various districts in relation to Civil Defense and disaster plans.

The Committee moves the adoption of the report of the Committee on Medicolegal Conference and recommends the commendation of the interested parties for their efforts and interest.

The Committee recommends rejection of the resolution proposed for submission to the AMA House of Delegates and wishes to go on record as reiterating its adherence to the free choice principle.

The Committee moves the adoption of the continued use and adherence to the guiding principles in the care and use of laboratory animals.

The Committee moves the adoption of the resolutions relative to the Medical Technologists and the professional status of Medical Technologists (M.T.-ASCP).

The Committee moves the rejection of the resolution introduced by Geib at the request of the Black Hills District Medical Society relative to membership of physicians in Federal service, annual dues to be set at \$10.00. As our Constitution and By-Laws provide that any full time military personnel can, by application become a member of district and state, without dues, it is the feeling of the Committee that we should encourage Black Hills District Medical Society to contact Air Base personnel and invite them to transfer membership or make application for membership in the society, informing the Executive Secretary's office of action.

A. Myrabo, M.D., Chr.
H. R. Wold, M.D.
R. A. Boyce, M.D.
G. R. Bartron, M.D.
C. A. Johnson, M.D.

SPECIAL COMMITTEE REPORT ON SUPPORT OF THE BASIC SCIENCE LAW

Be it hereby resolved that the South Dakota State Medical Association contribute \$500.00 in support of the Basic Science Board.

A. P. Reding, M.D., Chr.
J. A. Anderson, M.D.
C. L. Swanson, M.D.

REPORT OF REFERENCE COMMITTEE No. 6 NOMINATING COMMITTEE

The Nominating Committee wishes to submit the following slate of nominees for State Association Officers:

President—M. M. Morrissey, M.D.
President-Elect—F. F. Pfister, M.D. (Resigned)
A. A. Lampert, M.D.
Vice-President—Robert Buchanan, M.D.
Speaker of the House—C. Rodney Stoltz, M.D.
Councilor—Third District
Magni Davidson, M.D.
Councilor—Fifth District
P. Hohm, M.D.
Councilor—Sixth District
P. P. Brogdon, M.D.
Councilor—Seventh District
C. J. McDonald, M.D.

The Committee wishes to nominate Rapid City as the site of the 1959 meeting.

J. N. Hamm, M.D., Chr.
J. J. Stransky, M.D.
H. R. Wold, M.D.
C. L. Swanson, M.D.
P. Hohm, M.D.
C. Stern, M.D.
R. Monk, M.D.
R. H. Hayes, M.D.
A. W. Spiry, M.D.
E. A. Johnson, M.D.

REPORTS OF OFFICERS AND COUNCILLORS AS ADOPTED BY THE HOUSE OF DELEGATES

REPORT OF THE PRESIDENT

To the Officers, Council, House of Delegates, and Members of the South Dakota State Medical Association:

It has indeed been a pleasure to have met so many of the men about the state at these various District meetings that I have gone to. It is regretful that due to our busy practices we do not make the occasion to go to visit these doctors in their home towns where they are practicing. One is certainly gratified to find the excellence of their work in the various parts of the State.

I had the pleasure of visiting the following Districts: On June 29, 1956, at Pierre. August 9, 1956, Rapid City. I had a most enjoyable time. I arrived there a little bit late, however I was royally welcomed by Dr. Hare and Dr. Baker. We had a most enjoyable meeting at Dr. Baker's cabin. On August 17, 1956, my own District, The Third Medical District, I made my official visitation. On September 4, 1956, Watertown. On September 5, 1956, at Aberdeen. On November 6, 1956, the Sioux Falls District Meeting. On December 12, 1956, I was invited to go to the Rosebud District and we had our meeting at Burke. I was entertained at the home of Dr. Quinn. After visiting with this man, I felt that it would be a great loss to the

Medical History of South Dakota, if he didn't write up his experiences of practicing in the Rosebud District. He has certainly done a commendable piece of work there. On February 5, 1957, the Seventh District Medical Society at Sioux Falls. On April 2, 1957, I went to Mobridge with John Foster, on a very beautiful Wednesday afternoon. After the meeting we drove back in a notorious blizzard of South Dakota, arriving home about 4:30 in the morning. On April 11, 1957, I had the pleasure of attending the Huron District Meeting, at which time Dr. Cogswell was given his fifty year pin. I was not able to accept all of the invitations I was offered by various organizations in the State to represent the State Medical Association. Here are a few that I did attend: On August 31, 1956, Kansas City, to attend the dedication of the new AAGP Building. On September 12-15, 1956, the Public Health and Welfare meeting at Custer, South Dakota. On September 28, 1956, the South Dakota Heart Association meeting in Sioux Falls. On November 10 and 11, 1956, the North Central Medical meeting in St. Paul. This, by the way, is a very excellent meeting, where the officers of the North Central States meet once a year to discuss mutual problems. This year the Federal Government proposed the Medicare Plan and were given many very fine points by the members of this organization. In fact, I think that many of the suggestions that were made at this conference were incorporated into this Medicare Plan. I strongly urge anyone, whether or not he is an officer of the Medical Society, to attend this meeting. It is held every fall. On December 17, 1956, I attended the AMA Legislative meeting in Sioux Falls. On March 8, 1957, the Rural Health meeting in Louisville for four days. This was the National Rural Health Conference. January 8, 9 and 10, 1957, I attended the Governor's Ball and spent the following days getting acquainted with the legislators. On the 26th of January we were called into Chicago for the purpose of taking the leadership in carrying out the vaccination program for polio. I left here on the 25th, spent the 26th there, and arrived back here on the 27th. On returning plans were made for organizing and publicizing the campaign. Under Dr. Wold and his committee's excellent promotion, it was no time until we had utilized all the free and commercial vaccine. We are now being deluged with requests for vaccination. It seems that anything in short quantity is in demand. I had the pleasure of also attending the Medical School Banquet. This is indeed a very impressive and pleasant dinner. Dr. Hard seems to have the faculty of choosing excellent speakers. Dr. Bach gave a most impressive address on the subject, "What Makes a Man Great."

It has been a great satisfaction to me to see how every one who has been asked to be on committees works so well for the organization. I want to give my sincere thanks to all the officers of our organization and especially to our Executive Secretary, John C. Foster, and his entire staff. I do wish that more of the members of the South Dakota State Medical Association could actually see the amount of work that is done in this office and how much is being done for the State Medical Society and what a smooth running organization Mr. Foster operates. It would be impossible for any of us to carry on our practice and take these offices if it were not for this fine cooperation and work of Mr. Foster.

I hereby respectfully submit this report to the House of Delegates.

Alonzo P. Peeke, M.D.
President

The Committee has read and approved the report of the President, Dr. A. P. Peeke, and wishes to commend him for the excellent manner in which the affairs of his office were attended to during the past year.

REPORT OF THE PRESIDENT-ELECT

As President-Elect I have attended all Council meetings. As a member of the Executive Committee we have considered several emergency situations by conference telephone calls. Veterans care problems and Blue Shield questions were handled in this manner. I attended the meeting in Sioux Falls in December concerning the AMA request for a recommendation for a physician to be appointed to represent South Dakota in National Legislative problems.

I spent some time in the legislative halls during our recent session of Legislature. I wish to commend those men who left their practices for several days and spent their time and money in promoting our legislative programs. The results obtained shows the value of their efforts and the excellent organizational work of our Executive Secretary.

Again, as physician member of the Board of Charities and Corrections, I have had a busy year. I have found many points requiring consideration of the Board to have significance to medical men. I have kept the interests of our profession and our Association in mind.

Michael M. Morrissey, M.D.
President-Elect

The Committee has read and recommends approval of the report of the President-Elect.

REPORT OF THE VICE-PRESIDENT

My duties of vice-president during the past year have not been too arduous, but I have attended all of the Council meetings except one, and I have attended a special meeting called to meet the Washington representative of the AMA. I have been available to assist the President in conduct of his office.

Faris F. Pfister, M.D.
Vice-President

The Committee has read and recommends approval of the report of the Vice President.

REPORT OF SECRETARY-TREASURER

On December 17th a special meeting was held in Sioux Falls, when the Executive Committee, the National Legislative Committee, our Executive Secretary, John C. Foster, Councilor, T. H. Sattler, M.D. and P. P. Brogdon, M.D., met with Cyrus H. Maxwell, M.D., Assistant Director, Washington, D. C., Office of the AMA.

Dr. Maxwell outlined for us what is ahead for the 85th Congress. Some of the bills on the senate side would be (1) Problems of the Aging, (2) Aid to Medical Education, (3) Doctor draft (which they feel will die out), (4) Health Insurance for government employees, (5) Jenkins-Keogh Bill.

The final analysis of the conference was — **What can Doctors do as Individuals:** (1) Keep informed on current bills that may pass, (2) Make friends with your Congressmen, (3) Visit with them and invite them to our meetings whenever possible, (4) Thank them for what they have done, (5) Discuss with them what is the best medical care for most of the people, (6) Talk to our patients, explain what the legislation would actually mean to them. Dr. Maxwell stressed that the most important of all is — **Give Good Care to Our Private Patients.** This is still the best approach to all our problems.

As your officer, I attended all Council meetings held during the year; also spent three days at Pierre during the legislative session.

The duties of my office during the year were carried out with our able and competent Executive

Secretary, John C. Foster, in person or via telephone and letters.

A. P. Reding, M.D.
Secretary-Treasurer

The Committee has read and recommends approval of the report of the Secretary-Treasurer.

REPORT OF THE SPEAKER OF THE HOUSE

Your speaker has attended Council meetings in Huron in September and again in January.

A letter was sent to all component districts urging careful consideration in electing delegates to the State meeting because efficient, faithful representation of the component societies to the House of Delegates is essential for the democratic and efficient operation of our State Medical Association.

Before the State meeting, another letter of instruction will be sent to all members of the House of Delegates.

Respectfully submitted,
C. Rodney Stoltz, M.D.
Speaker of the House

The Committee has read and recommends approval of the report of the Speaker of the House.

COMMITTEE ON BUDGET AND AUDIT

The report of the Committee with recommended budget and the audit of funds were presented to the House of Delegates in the 1956 annual meeting.

I wish to report that for the year of 1956-57 we have remained essentially within our budget allowances. The finances of our Association are in satisfactory condition. The audit will be prepared by a Certified Public Accountant and presented to the House of Delegates during our 1957 annual meeting.

Michael M. Morrissey, M.D., Chr.
A. P. Reding, M.D.
M. Davidson, M.D.

The Committee has read and recommends approval of the report of the Budget and Audit Committee.

S. DAKOTA STATE MEDICAL ASSOCIATION CONSOLIDATED STATEMENT OF OPERATIONS

YEAR ENDED APRIL 30, 1957

Receipts:

State Dues	\$32,201.75
Annual Meeting	3,871.00
American Medical Association Dues	11,963.00
Miscellaneous Income	1,797.23
Interest-Savings Accounts	117.28
Interest—U. S. Gov.	
“G” Bond	25.00
Medicolegal Conference	1,059.65
Group Life Insurance Premiums from Members and Dividends	25,911.51
Advertising	21,659.85
Subscriptions	1,244.95

Total Receipts \$99,851.22

Disbursements:

Salary-Executive Secretary	\$ 9,600.00
Salary—others	5,024.27
Depreciation expense	431.38
Social Security Tax Expense	213.29

Legal and Audit	700.00	
Rent	400.00	
Telephone & Telegraph	1,191.73	
Office Supplies	1,748.63	
Dues & Subscriptions	1,258.00	
Officers' Travel and Council Meetings	2,745.71	
Executive Secretary—travel	3,764.07	
Annual Meeting	172.96	
Public Relations	1,834.26	
Blue Shield	15.00	
Miscellaneous Expense	235.38	
AMA Dues Remitted	11,963.00	
Taxes—Personal Property	55.40	
Unemployment Taxes	311.38	
Postage	698.85	
Legislative Expense	3,283.36	
Donation—Benevolent Fund	400.00	
Donation—Endowment Fund	200.00	
Ladies Auxiliary	546.12	
Medicolegal Expense	874.08	
Insurance Premiums		
Remitted	23,152.51	
Operating Supplies	17,885.47	
J. C. Foster 1/3 operating Surplus Journal of Medicine Fund	1,043.31	
Total Disbursements		\$89,748.14
New Gain to Net Worth		\$10,103.08

The Committee has read and approved the Statement of Operations of the General Fund of the State Medical Association.

REPORT OF THE EXECUTIVE SECRETARY

The fiscal year 1956-1957 proved to be the busiest in the eleven years of operation of the executive office in that two completely new programs, Blue Shield and Medicare, were initiated during the year, plus an unusually heavy legislative session.

A brief roundup of the executive secretary's activities divided into various field's follows:

Public Relations

A continuation of personal appearances on auto safety highlighted these activities which included 18 appearances before a total of 4,225 persons. In addition, presentations on mental health, association management, school health, banquet speeches, and other subjects covered 19 groups totaling approximately 1,960 persons.

In addition, the executive-secretary appeared on three TV shows, installed an AMA exhibit at the State Fair and placed numerous news releases in the States 169 newspapers. He has also arranged and placed an AMA Rural Health Medical Column in the "Dakota Farmer."

Liaison With Other Groups

The executive-secretary represented the Association in dealing with other health groups serving as president of the Board of the Minnehaha County Mental Health Center; Board member, South Dakota Mental Health Association; Board member, South Dakota Hospital and Home Association; ex-officio member South Dakota Joint Commission for Improvement of the Care of the Patient; Committee member, Nurse Legislation Joint Committee; President, Committee for Traffic Safety, Civil Defense, and others.

These liaison duties entailed attendance at 36 meetings during the year.

Blue Shield

South Dakota's new Blue Shield plan has taken up a large part of the executive secretary's time and efforts during its formative period. First contracts were sold in November and a total income of \$8,274.33 reported through March 21st. During

the year, in addition to the new office procedures engendered by the addition of Blue Shield, the executive secretary has attended meetings, conferences and conducted sessions out of the office totaling 33.

Council, House & Committees

The executive secretary of the Association has worked closely with the official bodies of the Association and the District Societies. This has meant attendance at 12 District Society meetings, but covering only eight of the Districts. Attendance at Committee, Council and House of Delegates meetings totaled 20.

The Journal

The executive secretary functions as business manager of the Journal and is responsible for its publication and financing. The Journal, as reported elsewhere in the report of the Publications Committee, has had an excellent year. Mrs. Dorothy Weck, assistant editor of the Journal for more than seven years, is leaving at the end of this fiscal year. Much of the credit for the success of the Journal should be hers.

Over the past eight years the business manager has received 1/3 of the annual surplus of the Journal. I would like to recommend that 50%, of each year's surplus be utilized in the following manner: 3/5 to the business manager, 1/5 to the medical editor, and 1/5 to the pharmaceutical editor.

Other Medical Organizations

The executive secretary is a member of the Board of Directors of the Medical Society Executives Conference and has attended two of its meetings during the year. In addition, attendance was maintained at the AMA session in Chicago and the Interim Session in Seattle. Also attended the North Central Conference and the National Medical Public Relations Conference.

Medicare

This is a completely new program that was added to the duties of the executive office during the past year. In setting up the program the executive secretary, in addition to the office procedures set up to implement the program, attended 10 meetings and conferences. The program has handled claims totaling \$20,000 for doctor bills and has had administrative costs of \$2,600 during the period December 7, 1956 to April 30, 1957.

Veterans Administration (Home Town Care)

The V.A. Home Town Care program completed its 10th year in December, 1956. The year 1956-57 saw payments of \$12,447.84 to South Dakota physicians and an administrative cost of \$3,264.69. Because some dissatisfaction in the operation of the program had been expressed by the V.A. a new contract is currently being negotiated. Contract negotiations have involved the executive secretary in two additional meetings.

Board of Medical Examiners

The executive secretary also functions as the executive secretary of the Board of Medical Examiners, maintaining the records, funds and correspondence for that body. Part of these duties consist of arranging two Board meetings during the year, one in the Black Hills and one in Sioux Falls.

Medicolegal Conference

The executive secretary, working with a joint Medical-Bar Association committee supervised arrangements for the 1st South Dakota Medico-legal Conference held in Huron in January. 153 persons attended a most successful meeting.

Finances

The executive secretary, under general authority of the secretary-treasurer is custodian of funds for the Association this includes the \$94,000.00 in the combined general, group life, and Journal ac-

counts, plus \$36,000.00 in the V.A. account, \$30,000.00 Blue Shield, \$18,000.00 Medicare, plus special funds (including Association Reserves, Benevolent Fund, Board of Medical Examiners funds) totaling \$24,000.00. This amounts to a processing or custody of funds totaling \$202,000.00 for the entire office operation.

Miscellaneous

Although grouped under one heading, the miscellaneous activities of the executive office include state legislative activities, which consumed two months of the executive secretary's time, the polio vaccine promotion, assisting in the creation of a medical assistants association, auxiliary activities, and preparation of the 1957 annual meeting as well as conducting the 1956 meeting.

The executive secretary totaled 160 meetings and speaking engagements during the year as indicated above.

His personal appreciation is accorded the staff, Mrs. Dorothy Weck, Miss Phyllis Sundstrom, and Miss Kay Hanna, as well as the officers and members of the Association who have cooperated in making the year a most successful one.

John C. Foster
Executive Secretary

The Committee has read and approved the report of the Executive Secretary.

REPORT OF THE AMA DELEGATE

Your AMA delegate has attended the annual session of the American Medical Association which was held in Chicago in June 1956, and the clinical session of the American Medical Association held in Seattle in December, 1956. Reports of the proceedings of each of those meetings has been duly reported and published in the South Dakota Journal of Medicine and Pharmacy.

In addition to the above meetings, many items of interim interest have come to both the attention of your delegate and his alternate, Dr. Reding of Marion. These problems have been answered to the best of our ability.

It is my suggestion that copies of the reports from the above mentioned meetings be included with this report when the material is referred to the proper reference committee. This would eliminate complete rewriting and reprinting of the material.

May I take this opportunity to express appreciation to the Association as a whole, to the personnel of our headquarters office and to Dr. Reding for the cooperation shown at all times.

Arthur A. Lampert, M.D.
AMA Delegate

The Committee has read and recommends approval of the AMA Delegate.

REPORT OF ALTERNATE DELEGATE TO AMA

It was my privilege as your Alternate Delegate to attend the 105th Annual Meeting of the American Medical Association in Chicago June 11-15, 1956, with your Delegate, Dr. A. A. Lampert.

Since your delegate has given a detailed report of this meeting in the South Dakota Journal of Medicine and Pharmacy, I will not bore you with a complete report but merely outline a few of the main items taken up by the House of Delegates; (1) Decided that hospital accreditation is a desirable activity that should be continued by the Joint Commission — but with certain new conditions in mind, (2) Offered all reasonable aid to the Department of Defense in its task of furnishing medical services to servicemen's dependents as provided in Public Law 569 signed by the President on June 7, 1956, (3) Asked the Federal Government to stop buying Salk anti-polio vaccine except for essential

health needs, and allow the vaccine to reach the public through regular commercial channels, (4) A proposal by the South Dakota Delegate to hold regional or national conferences of state grievance Committees as a means of exchanging suggestions on how grievances can best be settled was rejected.

At the interim meeting in Seattle in November 1956, among the dozens of issues acted upon were: Medical ethics, Veteran's care, Blue Shield benefits, and the Jenkins-Keogh plan. These issues were of special interest: (1) Urged passage of legislation that would limit V.A. medical care exclusively to veterans with service-incurred or service aggravated conditions, (2) Called for teamwork between the AMA and the American Bar Association so that a bill of the Jenkins-Keogh type might be enacted by congress at its current session, (3) Agreed to instruct AMA representatives on the Joint Commission on Accreditation of Hospitals to seek disciplinary action against community or general hospitals that discriminate against general practitioners.

For detailed information on the two meetings in 1956, refer to your AMA Journals and the South Dakota Journal of Medicine and Pharmacy.

May I express my appreciation to the State Association for allowing me to represent South Dakota as your Alternate Delegate at these two meetings. I will do my best to assist your Delegate, A. A. Lampert, M.D., in every way.

A. P. Reding, M.D.
AMA Alternate Delegate

The Committee has read and recommends approval of the Alternate Delegate to the AMA.

REPORT OF THE COUNCIL

The Council met three times during the year, June 4, September 16 and January 13.

Among other actions taken by the Council during the year were the following:

- Sponsorship of the AAPS Essay Contest for 1957;
- Continuance of the V. A. Program in South Dakota;
- Military Department Medical Care Program be operated through the Blue Shield Plan as the Administrative agent;
- Endorsed the setting up of the Medicolegal Conference;
- Endorsed the Post-Mortem Examination Act;
- Endorsed the wishes of the Board of Medical Examiners in setting up a new Model Practice Act;
- The Council took action to present two \$100 scholarships to medical students at the U. of South Dakota.
- Endorsed the Medical Assistants Association and helped them get organized.

Magni Davidson, M.D.
Chairman of the Council

The Committee has read and approved the report of the Council.

REPORT OF COUNCILOR OF FIRST DISTRICT

The Aberdeen District Medical Society was very active during the past year. The outstanding event was the bi-state meeting held in Aberdeen last June, a most successful meeting with an excellent scientific program.

The Society has an active membership of 45. We hold a dinner and scientific meeting the first Wednesday of each month. During the year we were fortunate in having the following speakers:

Dr. Robert Nelson—Sioux Falls
Dr. Clifford Gryte—Huron
Dr. George W. Rowney—Sioux City, Iowa
Dr. H. Farrell—Sioux Falls

Dr. Herbert Schmidt—Rochester, Minn.
 Dr. Corrin Hodgson—Rochester, Minn.
 Mr. Ray Williamson, Attorney, Aberdeen

Roster of 1957 Officers

B. F. King, M.D.—President
 Agnes Keegan, M.D.—Vice-President
 W. E. Gorder, M.D.—Secretary-Treasurer
 E. J. Perry, M.D.—Director
 P. V. McCarthy, M.D.—Director
 M. R. Gelber, M.D.—Director
 J. C. Rodine, M.D.—Censor
 P. G. Bunker, M.D.—Censor
 M. E. Sander, M.D.—Censor
 E. H. Rudolph, M.D.—Delegate
 J. L. Calene, M.D.—Delegate
 C. L. Voegel, M.D.—Alternate Delegate
 G. H. Steele, M.D.—Alternate Delegate

Paul V. McCarthy, M.D.
 Councilor—1st District

The Committee has read and approved the report of the Councilor of the First District.

REPORT OF COUNCILOR OF SECOND DISTRICT

Total members: 22
 Paid up to date: 22

Special activities for the year:

1. Cooperated with the schools in providing pre-school physical examinations.
2. Again carried out Immunization Programs in the city and rural schools.
3. Actively publicized and promoted, by means of newspaper ads in 1956 and again in 1957, the Polio Immunization Program.
4. Made all Society members automatic subscribers to *Today's Health*, by paying subscriptions out of District funds each year.

This Society notes with regret the death on January 1, 1957, of William G. Magee, M.D. Dr. Magee was a past president of the South Dakota State Medical Association.

Review of Meetings:

April 3, 1956: Members present 12

Program: "Complications of Labor"

Dr. Brooks Ranney, Yankton
 "Discussion of the Proposed South Dakota Blue Shield Program"

Dr. Robert Monk, Yankton

May 1, 1956: Members present 17

Program: "Progress in Military Medicine During the Korean War"

Dr. G. R. Bartron, Watertown
 "Discussion of Proposed South Dakota Blue Shield Plan"

Dr. E. Johnson, Milbank

Dr. R. Monk, Yankton

September 4, 1956: Members present 16

Program: Annual visitation by Dr. A. P. Peeke, President of the South Dakota Medical Ass'n.

October 2, 1956: Members present 16

Program: "Medical Care for Military Dependents"

John C. Foster, Sioux Falls

November 6, 1956: Members present 13

Program: "On Impact," A film produced by the AMA and Ford Motor Company

December 4, 1956: Members present 16

Program: "Relationships between the Medical Profession and the Body Politic"

Honorable Karl E. Mundt, U. S. Senator, South Dakota

Election of Officers:

President—Dr. J. Stransky
 Vice-President—Dr. S. Allen
 Secretary-Treasurer—Dr. M. C. Rousseau
 Delegates—Dr. D. Fedt and Dr. G. R. Bartron
 Alternate Delegates: Dr. A. Willen and Dr. S. Walters

Censors: Dr. J. W. Argabrite (3) years)

Dr. R. M. Kilgard (2 years)

Dr. G. R. Bartron (1 year)

January 8, 1957: Members present 14

Program: Business Meeting

February 5, 1957: Members present 16

Program: "Pancreatitis"

Dr. T. H. Sattler, Yankton

March 5, 1957: Members present 15

Program: "South Dakota School of Medicine"
 Dr. Walter L. Hard, Dean, South Dakota Medical School

J. J. Stransky, M.D.

Councilor—2nd District

The Committee has read and approved the report of the Councilor of the Second District.

REPORT OF COUNCILOR OF THIRD DISTRICT

No report.

Magni Davidson, M.D.

Councilor—3rd District

The Committee notes that no report has been filed by the Councilor of the Third District.

REPORT OF COUNCILOR OF FOURTH DISTRICT

Membership in the Fourth District Society for the year consisted of 21 paid up members and two unpaid members to date, with two honorary members. Three members have moved during the past year: Dr. Roman Hura of Eagle Butte, to practice in Howard, South Dakota. Dr. Paul Dzintars of Philip has moved to Faith, replacing Dr. Ehik. Dr. Roman Bilak has left Highmore to take post graduate studies.

Meetings were held during the year, with talks on Blue Shield and Medicare. One of the fall meetings was attended by the President, A. P. Peeke, M.D., and John Foster. Dr. Paul McCarthy, Dr. E. A. Rudolph and Dr. Paul Bunker, all of Aberdeen, were speakers at meetings during the year.

The following officers were elected for the present year: President, S. B. Simon, M.D.; Vice-President, R. C. Jahraus, M.D.; Secretary-Treasurer, J. T. Cowan, M.D., all of Pierre.

L. C. Askwig, M.D.

Councilor—4th District

The Committee has read and approved the report of the Councilor of the Fourth District.

REPORT OF COUNCILOR OF FIFTH DISTRICT

During the last year, 1956-57, the Huron District Medical Society held four meetings. The first was a lecture on the British health scheme from a layman's point of view. The second meeting in October was what we call our Pheasant Seminar with several out of state guest speakers. The local and out of town reaction was very favorable. The third meeting was in December during which the Medicare and Blue Shield plans were discussed by John C. Foster. The final meeting was April 11, at which time Dr. Mark Cogswell, of Wolsey, was presented with a fifty-year-pin. Again there was further discussion on the medicare and Blue Shield plans.

At the annual meeting, the new officers were Dr. Howard Saylor, Jr., President; Dr. Ted Hohm, Vice-president; Dr. D. J. Buchanan, Secretary-Treasurer; Dr. Y. H. Charbonneau, Censor of the Board; and Dr. Hofer, Delegate as past president; Dr. David Buchanan, Alternate Delegate as Secretary; Dr. B. T. Lenz, Councilor.

B. T. Lenz, M.D.

Councilor—5th District

The Committee has read and approved the report of the Councilor of the Fifth District.

REPORT OF COUNCILOR OF SIXTH DISTRICT

The following are dates of the Sixth District Medical Society meetings during the past year:

1. March 15, 1956
2. April 25, 1956 — Blue Shield Plan discussed and approved.
3. June 16, 1956 — Blue Shield Plan discussed and approved.
4. January 28, 1957 — Officers for 1957 elected:
A list of three (3) names were elected for Councilor:

H. R. Lewis, M.D.
P. P. Brogdon, M.D.
W. H. Fritz, M.D.

Delegates:

D. R. Mabee, M.D.
T. R. Pollerman, M.D.

Alternates:

J. P. McCann, M.D.
E. C. Bobb, M.D.

Censor:

O. J. Mabee, M.D.

President:

F. D. Gillis, M.D.

Vice-President:

D. R. Nelmark, M.D.

Secretary:

R. J. Delaney, M.D.

Dr. Brogdon reported on Medicolegal meeting at Huron.

B. R. Skogmo, M.D.
Councilor—6th District

The Committee has read and approved the report of the Councilor of the Sixth District.

REPORT OF COUNCILOR OF SEVENTH DISTRICT

The Seventh District held eight (8) meetings during the past year, with a general average of 60 members present at each meeting.

The Seventh District membership is as follows:

125 Members
6 Honorary members
7 on leave of absence

New officers for this year are as follows:

W. A. Arneson, M.D.—President
F. C. Kohlmeyer, M.D.—Vice-President
A. K. Myrabo, M.D.—Secretary
D. J. Peik, M.D.—Treasurer

I have attended all of the Council meetings this year.

C. J. McDonald, M.D.
Councilor—7th District

The Committee has read and approved the report of the Councilor of the Seventh District.

REPORT OF COUNCILOR OF EIGHTH DISTRICT

The Yankton District Medical Society met five times during the year 1956. Each meeting was accompanied by a banquet immediately preceding the scientific and business sessions.

The first meeting was January 12, 1956 and this represented actually the last meeting in 1955 that meeting did not occur. This meeting was held at the Yankton State Hospital and the dinner was followed by the guest speaker, Dr. Kenneth Keane, orthopedic surgeon from Sioux City, Iowa, who spoke on injuries of the ankle.

The proposed Blue Shield Plan was reviewed and Dr. Sattler, our Councilor, was advised to report that our District was in favor of the Blue Shield Program with the reservation of the District being able to review the final plan before its general acceptance.

Officers for the oncoming year, 1956, were elected as follows:

President—Dr. Marian Auld
Vice-President—Dr. D. B. Reaney
Secretary—Dr. R. S. Monk
Treasurer—Dr. Amos Michael

A Second meeting, in 1956, was held at the University of South Dakota Medical School in conjunction with their Postgraduate Training Program. Dr. D. P. Earle of Northwestern University presented a fine talk on "Edema, Fluid Electrolytes."

The District's representatives to the House of Delegates and their alternates were appointed. Dr. Marian Auld and Dr. D. B. Reaney are the delegates and Dr. R. F. Huber and Dr. C. B. McVay are the alternates. Dr. E. J. Moore was elected to the Board of Censors.

Four applicants for transfer to the District were unanimously elected to membership. These were: F. T. Younker, M.D., Lake Andes, from the Sioux Falls District; Ronald Price, M.D., Armour, from the Mitchell District; Mary Price, M.D., Armour, also from the Mitchell District; and J. C. Ohlmacher, Vermillion, from the Aberdeen District.

The District instructed our delegates to relate to the House of Delegates the feeling that this State should sponsor some type of farm safety program similar to that done by the Iowa State Medical Association.

A letter from Mr. Frank Coleman, Legislative Director of the AMA, to Mr. John C. Foster was read to the District.

Dr. Sattler arranged for letters to be sent to our Senators urging them to delete the disability payment feature of the Social Security as provided in HR 7225.

A special meeting for purposes of considering the proposed Blue Shield Plan was held April 19, 1956. The plan was reviewed by Dr. C. J. McDonald of Sioux Falls and Dr. Robert S. Monk of Yankton, and the District, following some discussion, went on record as being in favor of the Blue Shield Plan as proposed by the Insurance Committee.

On October 10, 1956, a meeting was held at Yankton State Hospital and the guest speaker was Dr. Joseph Posch of Detroit, Michigan, who presented a fine talk on "Hand Surgery."

Dr. A. P. Reding re-emphasized the need of AMEF donations and Mr. John C. Foster discussed the subject of military dependent care.

Dr. G. Landmann was accepted to Honorary Membership to the Society and Dr. Margaret Faithe was accepted unanimously to membership.

Dr. R. F. Thompson and Dr. T. H. Sattler discussed the Internist's objections to the present Blue Shield Plan as proposed and this was discussed by Mr. John C. Foster.

Dr. Grover moved that the Yankton District Medical Society go on record as approving the recommendations of the State Society of Internal Medicine and approve dropping all medical coverage for the first three days or making the fees realistic. This received unanimous approval by Vote.

The last meeting of the year was held December 5, 1956 at the Charles Gurney Hotel. At this meeting, Dr. A. P. Peeke, our State President, presented Dr. J. A. Hohf with a pin commemorating his fifty years of medical practice.

Mr. Clark Gunderson, from the University of South Dakota, spoke on some legal aspects of medical practice.

Officers for the oncoming year, 1957, were elected as follows:

President—Dr. D. B. Reaney
 Vice-President—Dr. R. S. Monk
 Secretary—Dr. Amos Michael
 Treasurer—Dr. W. F. Stange
 Dr. Hugo Andre was then elected to the Board of Censors.

Dr. T. P. Price, Jr., was elected to membership to the Yankton District.

There was considerable discussion regarding the doctor's problem of signing statements for continued disability and insurance reports in questionable cases. A motion was passed adopting an Enabling Act which provides for a Committee or Council which will review or evaluate such cases every two weeks, or when necessary, on a District level. This Committee is to act in an advisory capacity to the physician.

T. H. Sattler, M.D.
 Councilor--8th District

The Committee has read and approved the report of the Councilor of the Eighth District.

REPORT OF COUNCILOR OF NINTH DISTRICT

Backed by an enthusiastic and cooperative membership, the Black Hills District Medical Society during this past year has actively participated in a number of activities in the interest of better public relations.

Among our more successful ventures in public relations has been a presentation of monthly television programs sponsored by the District Medical Society under the chairmanship of R. A. Boyce, M.D., Rapid City. These programs have been well received by the public and many favorable comments have been made. Time for this series of telecasts was donated by KOTA-TV as a public service.

Following are a list of topics covered and the participants:

June 1, 1956

Allergies
 P. H. Koren, M.D.
 H. J. Hare, M.D.
 Moderator: J. N. Hamm, M.D.
 M. Marousek, M.D.
 T. E. Mead, M.D.

June 29, 1956

Vacation Hazards
 J. M. Butler, M.D.
 J. J. Feehan, M.D.
 Moderator: R. E. Jernstrom, M.D.
 J. C. Smiley, M.D.
 N. R. Whitney, M.D.

July 27, 1956

Summer Diseases
 H. L. Arhlin, M.D.
 T. R. Jacobson, M.D.
 Moderator: H. J. Grau, M.D.
 G. Heidepriem, M.D.
 C. A. Johnson, M.D.

August 24, 1956

Childhood Diseases
 S. F. Sherrill, M.D.
 W. L. Meyer, M.D.
 Moderator: A. M. Semones, M.D.
 G. Q. Olsson, M.D.
 B. S. Clark, M.D.

September 21, 1956

School Health
 H. E. Davidson, M.D.
 E. S. Palmerton, M.D.
 Moderator: J. D. Bailey, M.D.
 G. S. Owen, M.D.
 J. H. Davis, M.D.

October 19, 1956

Diabetes
 J. F. Leeds, M.D.
 F. J. Gilbert, M.D.
 Moderator: E. T. Ruud, M.D.
 F. R. Williams, M.D.
 M. E. Brownell, M.D.

November 16, 1956

X-Ray and You
 G. F. Wood, M.D.
 A. J. Saxton, M.D.
 Moderator: J. T. Elston, M.D.
 C. D. Lufkin, M.D.
 C. L. Behrens, M.D.

December 14, 1956

Cancer
 J. B. Slingsby, M.D.
 N. W. Stewart, M.D.
 Moderator: W. A. Dawley, M.D.
 T. G. Fitzsimmons, M.D.
 W. A. Geib, M.D.

January 11, 1957

Blue Shield Movie
 by John C. Foster
 Moderator: A. A. Lampert, M.D.

February 8, 1957

Heart Month
 C. E. Roper, M.D.
 R. C. McCroskey, M.D.
 Moderator: D. L. Kegaries, M.D.
 G. S. Paulson, M.D.
 R. L. Christianson, M.D.

March 8, 1957

Retarded Children
 Mrs. S. M. Crawford
 H. B. Munson, M.D.
 Moderator: G. Q. Olsson, M.D.
 R. E. Cooper, M.D.
 M. Nadelman, M.D.

The District Society has worked and counseled with the West River Mental Health Center, Inc. through a committee headed by John Feehan, M.D. and of successfully re-establishing the Mental Health Center.

On August 10, 1956, the District meeting was held at Spearfish. This meeting is an annual Fish Fry originally established by Dr. Lyle Hare. Dr. Koren H. Hodgson of the Mayo Clinic talked to the group on the diagnosis of thoracic pain and gave some high lights on a trip to Africa on which he was a medical advisor to a congressional committee headed by Representative Bolten of Ohio. Mr. John C. Foster, Executive Secretary of the State Association was present and discussed Civilian Defense and care of military dependents.

On October 9, 1956, the Society met at Sanator. Dr. Baughman of the University of Colorado, Denver, Colorado, discussed Sheehan's syndrome and reported on a case from his personal experience.

December 13, 1956, the meeting was held at the Homestake Club at Lead, South Dakota. Dr. E. C. Pirtle, Department of Bacteriology, University of South Dakota School of Medicine of Vermillion presented the discussion on encephalitis in South Dakota. Dr. Pirtle received random serum specimens from patients in Western South Dakota, particularly in the Butte County area and tested for anti-bodies against Western and Eastern equine encephalomyelitis. His work showed for the first time Eastern equine encephalomyelitis appearing in Western South Dakota.

Mr. Robert E. Driscoll, Jr., of the Legal staff of the Homestake Mining Company presented a discussion on the Jenkins-Keogh bill. The following officers were elected for the coming year:

J. J. Feehan, M.D., Rapid City, President
 C. A. Johnson, M.D., Belle Fourche, Vice-President

W. A. Geib, M.D., Rapid City, Secretary-Treas.
G. S. Paulson, M.D., Rapid City, for 3 year term
on the Board of Censors.

February 12, 1957, the Society met at the Arrowhead Country Club in Rapid City. Four clinical presentations were made by Rapid City physicians including hypothyroidism secondary to pituitary disease by G. S. Paulson, M.D.; Cobalt 60 in the Diagnosis of Pernicious Anemia by J. T. Elston, M.D.; Malignant Carcinoid Syndrome by E. T. Ruud, M.D.; and Agamma Globulinemia by J. D. Bailey, M.D. A committee was appointed to co-operate with the legal profession in setting up a Medicolegal Conference for the West River area.

This committee is composed of G. S. Owen, M.D., Chr., and W. A. Geib, M.D.

Arrangements were made whereby doctors from the Black Hills District Medical Society would go to Buffalo, South Dakota, to conduct polio immunizations clinics at the request of the citizens of that community. Following this meeting, a buffet dinner was served.

Among other activities of the District during the past year have been sponsorship of the Essay Contest, assistance in Diabetic Week Campaign and furnishing medical examiners at Scout Camp and Doctors for Buffalo Polio Clinic.

During the past year Dr. H. D. Newby, a long time practitioner of EENT, passed away.

J. D. Bailey, M.D.

Councilor—9th District

The Committee has read and approved the report of the Councilor of the Ninth District.

REPORT OF COUNCILOR OF TENTH DISTRICT

No. Report.

R. J. Quinn, M.D.

Councilor—10th District

The Committee notes that no report has been filed by the Councilor of the Tenth District.

REPORT OF COUNCILOR OF ELEVENTH DISTRICT

The District met once during the year at Mo-bridge, on Wednesday, April 3. Dr. A. P. Peeke made his presidential visit and Mr. Foster talked on Medicare and Blue Shield.

Poor attendance at the meeting was due to a blizzard.

G. C. Torkildson, M.D.

Councilor—11th District

The Committee has read and approved the report of the Councilor of the Eleventh District.

REPORT OF COUNCILOR OF TWELFTH DISTRICT

Two meetings of the Twelfth District were held during the year 1956. Dr. E. A. Johnson was elected as Councilor of the 12th District to replace Dr. Pfister, who has higher duties to perform.

A thorough discussion was held at the two meetings regarding Blue Shield and the District went on record in favor of it.

E. A. Johnson, M.D.

Councilor—12th District

The Committee has read and approved the report of the Councilor of the Twelfth District.

REPORTS OF COMMITTEES AS ADOPTED BY THE HOUSE OF DELEGATES

REPORT OF THE COMMITTEE ON SCIENTIFIC WORK

The Committee on Scientific Work submits the Scientific Program for the 1957 annual meeting:

"Stress" Film, Courtesy Pfizer Laboratories.

"Surgical Management of Peptic Ulcer" by Owen Wangenstein, M.D.

"Roentgen Examination of Urinary Tract" by Earl Barth, M.D.

"Acute Vascular Emergencies in the Extremities" by Joseph M. Janes, M.D.

"Low Back Pain — In General Practice & Consultation" by James K. Stack, M.D.

"Immediate Etiologic Diagnosis in the Convulsing Patient" by Larry Calkins, M.D.

"Treatment of Carcinoma of the Cervix" by J. A. del Regato, M.D.

"The Surgery of Occlusive Vascular Diseases in the Extremities" by Joseph M. Janes, M.D.

"Alimentary Tract Cancer" by Owen Wangenstein, M.D.

"Still Going Places" Film, Courtesy Pfizer Laboratories.

"Hypertension: A Tale of Pills, Philosophy and Ignorance" by J. Earle Estes, M.D.

"Communications in Medicine: On Medical Writing" by J. P. Gray, M.D.

"Diagnoses of Emotional Disturbances in Children" by Jerman Rose, M.D.

"The Office Management of Common Ear, Nose and Throat Problems" by Benjamin Bofenkamp, M.D.

"The Management of the Infertile Couple" by Nicholas Fugo, M.D.

"Treatment of Emotional Disturbances in Children" by Jerman Rose, M.D.

Question and Answer Session "Problems of Peripheral-Vascular Disease" by J. Earle Ester, M.D. Guest Discussion Leader, D. L. Kegaries, M.D., Chairman.

A. P. Peeke, M.D., Chr.

M. M. Morrissey, M.D.

F. F. Pfister, M.D.

A. P. Reding, M.D.

Your Reference Committee congratulates the Committee on Scientific Work for the interesting and stimulating program they have arranged and recommends the adoption of their report.

REPORT OF COMMITTEE ON PUBLIC POLICY AND LEGISLATION

The Committee supervised the Association legislative activities during the session in Pierre, January 8 - March 8th. The executive secretary was on the ground all during the session as were 38 physicians who spent three days each in getting acquainted with legislators and letting them know the views of the profession.

The Association sponsored 13 bills of which 9 were passed. Support was given 5 bills of which 5 were passed. Opposition was presented on 5 bills, all of which were defeated.

A. P. Peeke, M.D., Chr.

F. F. Pfister, M.D.

L. C. Askwig, M.D.

Your Reference Committee believes the medical profession should be especially pleased with the results obtained by the Medical Association in obtaining the passage of a large number of bills they sponsored or supported and aiding in the defeat of bills which were detrimental to the public welfare.

REPORT OF THE PUBLICATIONS COMMITTEE

During the past fiscal year the South Dakota Journal of Medicine and Pharmacy published 1040 pages, an increase of 88 pages over the previous year. Editorial, scientific articles and news items totaled 487 1/4, which made a reduction of 25 from the year before, but advertising pages increased a total of 113.

Forty-three, an increase of 9 over last year, scientific or medical economic articles were printed. Twenty-six of these were the output of South Dakota authors, which was an increase of 10 over last year. The Pharmaceutical Section, under the editorship of Mr. Harold Bailey, at South Dakota State College, has been increased in size and the format improved. Financially, the Journal had receipts of \$24,000 with a bank balance of \$600 and expenses of \$20,500 during the fiscal year.

The Chairman of the Publications Committee, who is one of the five Directors of the State Medical Journal Advertising Bureau, and also a member of the Advisory Committee for the Bureau, attended both semi-annual meetings of the Bureau. The first was held in Chicago in June, and the second in Seattle in November. The Bureau handles cooperative advertising for 33 State Medical Journals serving 37 state medical societies holding membership in the State Journal Advertising Bureau. Most of the income of our Journal is derived from this cooperative advertising.

R. G. Mayer, M.D., Chr.

R. E. Van Demark, M.D.

T. H. Sattler, M.D.

Your Reference Committee commends the Editor of the Journal, Dr. Mayer, for performing his usual fine work with the Association Journal. It is gratifying to note the large number of articles contributed by S. D. physicians.

REPORT OF THE COMMITTEE ON MEDICAL DEFENSE

The Medical Defense Committee did not meet as there were no questions of medical defense brought forth: therefore there is no business to report.

A. P. Reding, M.D., Chr.

D. R. Mabee, M.D.

Russell Orr, M.D.

Your Reference Committee believes that due to the increasing number of claims of malpractice and the high rates for insurance coverage against such suits that it would be advisable for the Council to use a questionnaire type of survey to be sent to the members of its Association so that insight may be gained into the magnitude of the problems of malpractice suits.

REPORT OF THE MEDICAL SCHOOL AFFAIRS COMMITTEE

The Medical School Affairs Committee met once during the year on January 12, 1957 at Huron, South Dakota.

Dr. Walter L. Hard presented the following program to the group.

1. Recommendation to Council for allocation of funds for the two medical student scholarships to be awarded in April. This is to total \$200.00. Also \$50.00 to partially defray travel expenses of delegates to S.A.M.A. annual meeting. Dr. Price moved that the Committee recommend to the Council of the S. D. Medical Association the allocation of funds

for two medical student scholarships in the amount of \$100.00 each, and also \$50.00 to help defray the cost of a delegate to the Student AMA annual meeting. Seconded by Dr. Gillis, motion carried.

2. Dr. Thomas Y. Nakao, Los Angeles, endowment for medical scholarships in amount of \$8,000.00.
3. Consider recommendation for Distinguished Service Award to Mrs. Harry T. Dory. This recommendation is to be brought to the attention of the Council.
4. Admissions:
 - (1) Increase in acceptance deposit to \$100.00.
 - (2) Increase in tuitions:
 - Average all Medical Schools \$684.00.
 - In-State \$320.00 vs. \$285.00.
 - Out of State \$550.00 vs. \$495.00.
 - Average all Medical Schools \$857.00.
5. Postgraduate Courses:
 - December 5 Doctors—Isotopes
 - April 3-6 Fluid and Electrolytes
 - Annual Meeting—April 6
6. A.M.E.F. Contributions—Designated to U.S.D.
 - 1956—124 Contributors—\$5,046.50
 - \$40.00 average
 - 1957—101 Contributors—\$4,988.45
 - \$49.00 average
7. Medical ethics in medical curriculum reference AMA recommendation. Present inclusion in program at USD.
8. Research grants received during 1956 total \$41,000.00.
9. Summer programs for medical students — Response:

Funds for U.S.P.H.	\$3,200.00
Polio	1,200.00
Lederle	600.00
	<hr/>
	\$5,000.00

10. Budget-Appropriations for 1956-57—\$183,080.00
 - Request for 1957-58 and 1958-59—\$232,830.00
 - Increase of \$49,750.00 or 27%
 - Governor's budget recommended \$231,420.00 or 25%.
 - This increase, if available, NOT to be misconstrued as salary, increase, for reasons discussed. Support for appropriations.

The Committee members also discussed the possibility of any physician interested in lecturing at the medical school on Medical History should contact the medical school. It was also suggested that an appeal for such physicians be put in the South Dakota Journal of Medicine.

C. B. McVay, M.D., Chr.

H. Russell Brown, M.D.

Ronald Price, M.D.

F. D. Gillis, Jr., M.D.

W. H. Saxton, M.D.

F. R. Williams, M.D.

Your Reference Committee endorse the suggestion that two student scholarships at \$100.00 each, and \$50.00 travel expenses for a delegate to the SAMA be provided. Your Committee notes with gratitude its generous contribution of \$8,000.00 by Dr. Thomas Y. Nakao to the Medical School. The medical school should be encouraged to continue and expand its program of post graduate education for S. D. Physicians. Your Reference Committee recommends the adoption of the Medical School Affairs Committee report.

REPORT OF COMMITTEE ON MEDICAL ECONOMICS

No report.

M. Davidson, M.D., Chr.
R. H. Hayes, M.D.
Abner Willen, M.D.

REPORT OF THE COMMITTEE ON NECROLOGY

The Committee reports the following deceased physicians in the State during the past year or were not reported last year:

L. J. Cramer, M.D., Hot Springs, passed away in November, 1956.

F. D. Gillis, M.D., Mitchell, passed away June, 1956.

W. G. Magee, M.D., Watertown, passed away in January, 1957.

H. D. Newby, M.D., Rapid City, passed away in 1956.

C. E. Robbins, M.D., Pierre, passed away in 1956.

C. A. Seeman, Miller, passed away in 1955.

G. A. Stevens, M.D., Sioux Falls, passed away June 21, 1956.

M. A. Welbes, M.D., Bridgewater, passed away in December of 1956.

Also Dr. C. E. Anderson, Moose Lake, Minnesota, formerly of South Dakota passed away in 1956.

J. B. Janis, M.D., Chr.
D. J. Glood, M.D.
M. D. Faul, M.D.

REPORT OF THE COMMITTEE ON PUBLIC HEALTH

No report.

R. K. Rank, M.D., Chr.
F. C. Totten, M.D.
G. J. Van Heuvelen, M.D.

SUB COMMITTEES REPORT OF THE SUBCOMMITTEE ON CANCER

Medical efforts concerning cancer in South Dakota are directed mainly through the South Dakota Division of the American Cancer Society, which is directly integrated with the South Dakota State Medical Association in that a portion of its officers and commissioners are members of the South Dakota State Medical Association. During the past year the following served:

W. A. Dawley, M.D., Rapid City
President

Paul V. McCarthy, M.D., Aberdeen
Executive Chr.

Hans Jacoby, M.D., Huron
Commissioner

D. H. Breit, M.D., Sioux Falls
Commissioner

William Duncan, M.D., Webster
Commissioner

G. F. McIntosh, M.D., Eureka
Commissioner

L. C. Askwig, M.D., Pierre
Commissioner

Dr. W. A. Dawley was professional delegate to the American Cancer Society at its annual meeting in New York.

The growth of the South Dakota Division of the American Cancer Society has been steady since its re-organization in 1946. At the present time it has a well organized and active membership throughout the entire state of South Dakota.

Its efforts are three-fold: education, research, and service to the individual patient. It maintains a state office in Watertown, seeks the co-operation of all physicians and welcomes any opportunity to serve them, and, through the medical profession, to help in the fight against cancer.

Paul V. McCarthy, M.D.

W. A. Geib, M.D.

J. V. McGreevy, M.D.

The policies of the South Dakota Division and its American Cancer Society are to be highly commended because of a strict established principle of seeking the advice of physicians in carrying out all phases of their program. The evidence of increased public interest and awareness of cancer is in large part due to the activities of this organization. The time and effort spent by many members of the Medical Association as officer and commissioners of the State Division of the American Cancer Society is sincerely appreciated.

REPORT OF THE SUBCOMMITTEE ON TUBERCULOSIS

With increased use of resection and more intensive chemotherapy for tuberculosis the patient population at the State Sanatorium shows a persistent decrease. This trend is evidenced in practically all States. Many States are closing tuberculosis institutions or changing them to other uses. The recent session of the legislature permitted the acceptance of non resident patients. If arrangements are made with other States if may be possible to increase our patient population. This seems desirable.

The recent session of the Legislature also made a voluntary admission to the State Sanatorium possible, state residence being the only requirement stated in the law. So far (at the time of writing of this report) an Attorney General's opinion has not been secured. It is possible that this law could be interpreted so that any patient could be admitted because at no place is the word tuberculosis or even chest disease mentioned. To a large extent it will depend on whether the Attorney General interprets the law as it is written, or as he feels the legislators intend it to be written.

It is gratifying to report that the death rate from tuberculosis continues to decrease. It certainly is practical now to secure a positive Mantoux on every patient, before a diagnosis of tuberculosis is considered. With the decreasing incidence of tuberculosis, mass surveying by Mantoux testing will be increasingly important. Mass X-raying will still be useful for detecting non-tuberculosis conditions and certainly should not be decreased or discontinued. Fungi are increasing and if tuberculosis continues to decrease, fungi soon will be a more probable diagnosis than tuberculosis.

The routine chest X-ray of all hospital patients is of tremendous value in Case-Finding and also serves to protect hospital personnel from contact with un-diagnosed cases.

W. L. Meyer, M.D., Chr.

R. G. Mayer, M.D.

Saul Friefeld, M.D.

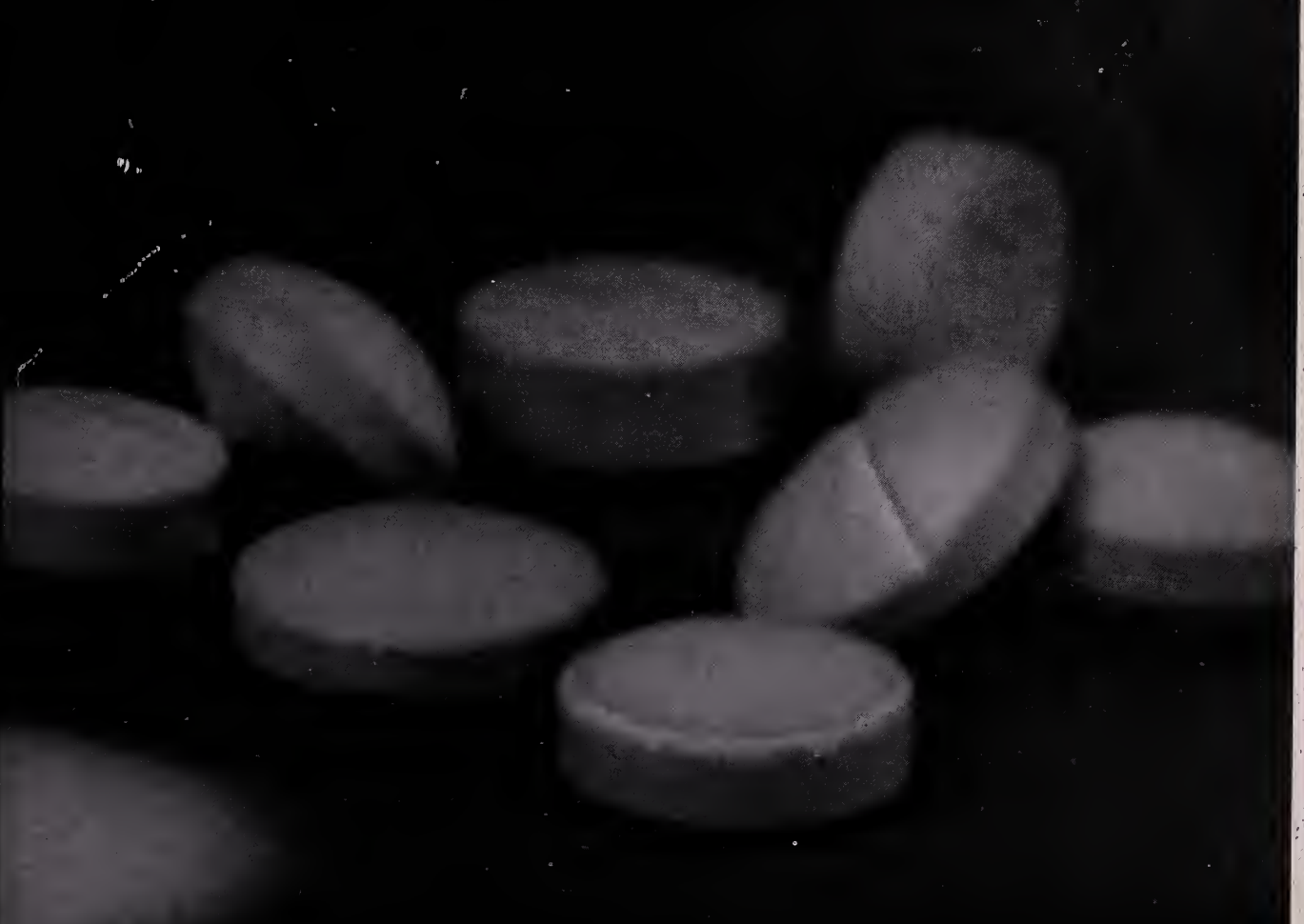
The effectiveness of the Subcommittee on Tuberculosis is demonstrated by their fine report. The Reference Committee moves the adoption of this report.

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SULFAMETHOXYPYRIDAZINE LEDERLE

**24 hour therapeutic
blood levels with
a single (1 Gm.) dose**



cuts sulfa dosage 75%

KYNEX Sulfamethoxypyridazine, the new, long-acting sulfonamide, now enables the physician to attain more effective sulfa therapy with these unequaled clinical advantages—

LOW DOSAGE¹—only 2 tablets per day.

RAPID ABSORPTION¹—therapeutic blood levels within the hour, blood concentration peaks within 2 hours.

PROLONGED ACTION¹—10 mg. per cent blood levels that persist beyond 24 hours on a maintenance dose of 1 Gm.

BROAD-RANGE EFFECTIVENESS—particularly efficient in urinary tract infections due to sulfonamide-sensitive organisms, including *E. coli*, *Aerobacter aerogenes*, paracolon bacilli, streptococci, staphylococci, Gram-negative rods, diphtheroids and Gram-positive cocci.

GREATER SAFETY—high solubility, slow excretion and low dosage help avoid crystalluria. No increase in dosage is recommended; the usual precautions regarding sulfonamides should be observed.

CONVENIENCE—the low maintenance dosage of 1 Gm. (2 tablets) per day for the average adult offers optimal convenience and acceptance to patients.

TABLETS: Each tablet contains 0.5 Gm. (7½ grains) of sulfamethoxypyridazine. Bottles of 24 and 100.

SYRUP: Each teaspoonful (5 cc.) of caramel-flavored syrup contains 250 mg. of sulfamethoxypyridazine. Bottle of 4 fl. oz.

(1) Boger, W. P.; Strickland, C. S. and Gylfe, J. M.: *Antibiot. Med. Clin. Ther.* 3:378 (Nov.) 1956.

*Reg. U.S. Pat. Off.

LEDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER, NEW YORK



REPORT OF THE COMMITTEE ON MATERNAL AND CHILD WELFARE

The Committee has initiated a study of Obstetric analgesia and anesthesia as practiced within the State of South Dakota. Since this State has densely populated urban areas and lightly populated rural areas this study should elicit problems presented by the practice of obstetrics under varying conditions, and should, therefore, be more valuable than a similar study, for instance, in a large city. When the material is compiled and studied it will be made available to the doctors in the state.

Brooks Ranney, M.D., Chr.

W. E. Van Demark, M.D.

L. W. Tobin, M.D.

The Committee on Maternal and Child Welfare is to be commended for their detailed study of obstetric analgesia and anaesthesia which is now in progress. The Reference Committee moves the adoption of this report.

REPORT OF THE COMMITTEE ON DIABETES

No. report.

D. R. Nelimark, M.D., Chr.

E. W. Sanderson, M.D.

M. E. Sanders, M.D.

Your reference Committee believes that diabetes is a problem which warrants greater interest than has been shown by members of the Association. Your Reference Committee recommends an increased effort to stimulate interest among its public on diabetes by your Committee on Diabetes.

REPORT OF THE EXECUTIVE COMMITTEE

The Executive Committee held one meeting during the year to discuss office personnel of the executive office. It was agreed to replace the assistant editor immediately and to add one additional person to the office staff.

This committee also conferred several times by letter and telephone to discuss matters pertaining to the Association. Conference telephonic approval was given the "Medicare" agreement as was approval for the Salk Vaccine Promotion.

A. P. Peeke, M.D., Chr.

M. M. Morrissey, M.D.

F. F. Pfister, M.D.

C. Rodney Stoltz, M.D.

A. P. Reding, M.D.

Magni Davidson, M.D.

Your Reference Committee moves the adoption of this report.

REPORT OF THE GRIEVANCE COMMITTEE

To the Officers, delegates, councilors and members of the South Dakota State Medical Association:

Your Grievance Committee wishes to make the following report of its activities during the past year:

There has been no formal meeting of this Committee since the last annual meeting, but several matters have been discussed, actions agreed on, and reports made to persons who had felt aggrieved in one way or another. The Chairman has been in consultation with a legal firm representing one of the State members who is being unjustly

sued for malpractice and probably other members of the Committee have also given of their time to defend other members, unknown to the Chairman. A resume of the important cases handled is appended.

The Chairman of the Committee attended a Medicolegal interprofessional session in Huron recently, at which no other Committee members were able to attend. The Committee was thus represented in several discussions, formal and informal, and I do not believe that the standing of the Profession was harmed by this representation. In fact I believe a definite step toward mutual respect and appreciation was established. I understand the meeting is to be made an annual affair. I urge our doctors to attend.

Grievances investigated and acted upon were handled in this matter. The Chairman upon receipt of a grievance writes to all parties involved, telling them that the complaint has been received and is being investigated. Sympathetic words are freely used and regrets that a grievance had arisen are expressed. Usually more information is asked from the complaining party, and a full report requested from the doctor involved. No distinction is made between State members and non-members. After a sufficient investigation is accomplished, a statement of the grievance, a disclosure of all facts obtained in the matter, and a reply to the aggrieved person is prepared. Then the matter is referred to the other members of the Committee and suggestions asked or approval of the reply requested. The final reply to the aggrieved person is made on the basis of the replies received from the Committee members. In this matter costly trips to hold personal meetings is avoided, although the inter-discussion is lost. Almost invariably the Committee has approved the action suggested by the Chairman, and oddly enough, this has usually been enough to quiet, settle and explain matters under complaint, so as to negate further action. It is believed that in most instances all parties are satisfied, and as good relationships restored as could be hoped for.

Matters handled since last annual report:

#1. The fees charged by a physician appeared exorbitant to the Estate Attorney. The doctor claimed that his secretary had made an error, and submitted a MUCH different set of charges, as soon as the matter was called to his attention. All parties were satisfied. In a letter from the attorney expressing his satisfaction he wrote "I certainly appreciate the help that you have given . . ."

#2. A case of an alleged misuse of radium by a doctor. This occurred eleven years ago, and the doctor has been deceased for several years. The associate however, was being threatened. This doctor believed himself immune because of having been the referring physician. Complainant stated that he was advised by a Minneapolis Attorney who advised that statute of limitations did not apply in this matter, and that the referring doctor was equally to blame. The Committee advised the doctor to notify the insurance carriers both he and the deceased doctor had retained at the time of the alleged fault. Nothing more has been heard following our letter to the parties concerned, and it is believed settled, since nothing more has been heard about the complaint.

#3. A complaint by a doctor against a group in his community claiming undue and unethical advertising under the guise of publicising a forthcoming Polio clinic. Copies of numerous newspaper ads were presented, which were possibly not in the best form, but which were not actionable. The Committee remonstrated with the one group and condoled the other, and while it is doubted that

entire amicable relations will ever exist between the two factions, it is hoped that they are now less strained.

#4. Consisted only of a report from a Medical Group in the State, enclosing copies of correspondence relative to a complaint written them by a patient, and the wish that this committee would have a basic file in the event of future filing of a grievance by this patient. Nothing more has been heard of this matter.

#5. This was a grievance filed by a patient against a Group of physicians and one specific member of that group. The claim appeared to us to be a means of avoiding payment of a final balance due. Rather bulky correspondence resulted in the group suggesting, unrequested by the Committee, to consider the bill paid for the nuisance value. In this matter it appeared that perhaps another physician might have encouraged the grievance. A very casual letter to this doctor (out of State) brought a hot denial and an injured dignity type of response. He reviled us for what he termed the "nastiest" letter he had ever received, and demanded an apology. He did not get one, but did get a letter of sufficiently stronger wording that he can no longer say the first one was the nastiest letter he had ever gotten. No more has been heard of either part of this case.

#6. A resident of another State, (borderline area) came to a South Dakota physician, and subsequently charged mis-diagnosis and improper treatment. He returned to his former home physician, and a letter asking the doctor out of state if anything he might have said and intimated could have been the cause of the grievance has remained unanswered, but the patient soon thereafter wrote assuring us that he wanted to let the matter drop. It is interesting that this neighboring State has a VERY ACTIVE Grievance Committee.

#7. A graduate nurse, married to a soldier on active foreign duty and about to join him, complained at the charges made against her for the required immunizations and vaccinations for herself and children. She also felt aggrieved that the doctor had allowed a non-medical office assistant to administer some of the shots. The greater our attempt to placate this woman the greater her anger and disgust seemed to rise. Finally the emotional phase became so obvious that further attempts to explain were dropped and no letters have been exchanged since last September, when she asked "have you set yourself as God?" This woman definitely did not want to pay her bill, that is certain. It is not known whether or not she did.

#8. This was a matter of a refusal from an insurance company to pay for physiotherapy such as whirlpool bath, diathermy, etc., in a compensation case. I was asked by the physician to enter into the matter, and after writing to the industrial and insurance commissioners of the State, and getting their favorable opinion, I wrote the Insurance Company (as had the insurance and industrial commissioners, after which the company paid the bill and there has been no further refusal to pay for such services, within reason.

#9. A professional man (non-medical) registers grievance against a physician because in effect, the physician did not drop every other patient he was attending in his office to come out to the hospital immediately to see his Father, who had been a patient of the doctor previously, and had now suffered a severe cerebral hemorrhage. He did see him later that day. At 3:30 the next morning he again called the doctor to come because the father was in very poor condition, and while the doctor

was talking to the man, trying to get out of making the unreasonable call, the patient expired. The man now accuses the doctor of being without humanitarian feelings, being more interested in money than the loving care of his patients, heartless, etc., etc. He seeks no redress, but is probably worried over the physician's soul. This complaint has been started in processing, one letter has been written the complainant, and a report from other letters have been received. The final letter has been written to the man, but not submitted to the Committee.

#10. This is a case that was reported last year as one that I believed had been dropped by the party bringing the grievance. It appears that the husband of the deceased is related to an attorney, of rumored questionable standing. A minor operative procedure was about to be done, and the patient died. Trilene anesthesia was used. A very few days before the statute of limitations would have become effective, suit was filed. The case is being handled legally, for the physician and the insurance company by a very competent attorney in Sioux Falls. Your Chairman has been in close contact with this defending attorney, and has secured the aid of anesthetists and other physicians for the defense of the doctor involved, I believe it will work out satisfactory, but with considerable expenditure of time and money on the part of the physician.

The Committee believes that as time passes and new grievances are sifted and handled the value of our work will become greater and greater not only to physicians in general, but will assure our patients of a still higher grade of medical care in South Dakota than they now enjoy, and go far to create better public relations for our profession.

An admonition is given to all members of our profession to use great caution in discussing the care given patients by former medical advisers, for too often our words will be misused by malcontents in an attempt to obtain personal gain at the expense of our fellow members. This does not pertain to obvious errors due to incompetence or carelessness, for it is only by making each of us answerable for our faults and misdeeds that the high quality of medical care now practiced can be maintained and improved.

Respectfully submitted,
THE GRIEVANCE COMMITTEE
L. J. Pankow, M.D., Chr.
D. S. Baughman, M.D.
David Gregory, M.D.
Roy Jernstrom, M.D.
A. W. Spiry, M.D.

Your Reference Committee notes the obvious importance of this Committee by the fine report submitted to the House of Delegates. Your Reference Committee recommended as required reading the entire report by the membership of the Medical Association. Your Reference Committee expresses the appreciation of the House of Delegates to the Chairman and Committee members for their fine work and accomplishments.

REPORT OF THE COMMITTEE ON MENTAL HEALTH

The Mental Health Committee has not met in the past year as a formal group or meeting due to the widely disseminated locations of the various members. However, what problems have arisen that were felt to call for the evaluation of the Committee, such has been carried out either by phone calls or correspondence and in turn with communications with the president of the State Medical Association. These in brief, are the change of ad-

ministration and problems related to such at the Yankton State Hospital and the local problem of the Minnehaha County Medical Health Center. It is hopeful that a formal meeting will be possible during the State Medical Association meeting.

George Smith, M.D., Chr.
E. S. Watson, M.D.
M. R. Gelber, M.D.
Clark Johnson, M.D.
R. C. Knowles, M.D.
H. E. Davidson, M.D.

Your Reference Committee recommends the adoption of the report of the Committee on Mental Health.

REPORT OF THE BENEVOLENT FUND COMMITTEE

Report of the Benevolent Fund Committee to the South Dakota State Medical Association in Sioux Falls, May 18-21, 1957.

We can be brief. We who have been actively concerned with this Fund from its beginning, are pleased that it was started and that it has been continually augmented. The original intent of the Fund shall not be discarded, but it is presently being used for loans to needy medical students, who are properly recommended by the State Medical School, Dean and others.

It is strongly recommended that the State Medical Association continue to make the annual allotments to this Fund.

Following is a tabulation of the status of this Fund as of December 31, 1956.

Cash in Bank	\$1,601.94
Six Government Bonds	3,700.00
Seven Loans to Students	2,700.00
	<hr/>
	\$8,001.94

This report is respectfully submitted by the Committee.

W. E. Donahoe, M.D., Chr.
J. C. Hagin, M.D.
F. C. Totten, M.D.

Your Reference Committee calls to the attention of the House of Delegates and Council to the statement of the Benevolent Fund that the original intent of the Fund shall not be discarded, but that the Fund is presently being used for loan for needy medical students. Your Committee recommends the adoption of the report of the Benevolent Fund Committee.

REPORT OF THE COMMITTEE ON RHEUMATIC FEVER & HEART DISEASE

We are investigating the advisability of adopting bicillin by the Wyeth Laboratories for needy families with children who have rheumatic fever and heart disease. Further reports will follow later.

J. Argabrite, M.D., Chr.
H. W. Farrell, M.D.
B. T. Lenz, M.D.

Your Reference Committee recommends the adoption of the Rheumatic Fever Committee.

SPECIAL COMMITTEES REPORT OF RADIO BROADCASTS COMMITTEE

The Committee's main function is to assure the wide spread and continuous use of AMA radio transcriptions by the various radio stations throughout the State.

The Committee has had no meetings during the year. However, Committee activities were coordinated by telephone and letter. The Committee's objective is two fold: (1) To have the radio transcriptions used on a weekly basis by the stations throughout the State; (2) to provide for the

advanced programing of these weekly transcriptions for a twelve month period. This objective has been accomplished completely in some areas and only partially in others.

In addition to the scheduled transcriptions, time has been obtained for physician interviews to publicize Medical Education Week and to publicize the Polio Immunization Program.

John J. Stransky, M.D., Chr.
Wm. Fritz, M.D.
R. C. Jahraus, M.D.
P. H. Koren, M.D.
F. D. Leigh, M.D.
Robert Olson, M.D.
J. C. Rodine, M.D.
J. P. Steele, M.D.

The Committee approves the report of the Radio Broadcasts Committee and recommends in view of the increasing use of television, the change in name to Radio Broadcasts and Telecasts Committee.

REPORT OF THE AMEF COMMITTEE 1956-1957

As in previous years the AMEF Committee conducted a letter solicitation type of campaign. This was done in accordance with the recommendation of the previous committee. It is with sincere thanks that the Committee wishes to express its appreciation to A. A. Lampert, M.D., John C. Foster, Executive Secretary, and Dr. Walter L. Hard, Dean of the School of Medicine, for their appealing letters which were sent to the doctors of South Dakota and the alumni of the School of Medicine.

Perhaps some facts and figures taken from the National Committee's report up to December 31, 1956 might be of interest. Certainly this report reveals that many physicians, organizations, people of industry, auxiliary members, and lay people realize the importance of maintaining the high standards in our medical education without aid from the federal government. This should be a challenge to the doctors in South Dakota.

The amount transferred to the National Fund for Medical Education and distributed to Medical Schools since 1951 is \$4,684,312.00. The amount available for distribution on December 31, 1956 was \$1,072,727.00. This makes the total income since the beginning of AMEF (1951) \$5,757,039.00.

Source of Income 1956

Physicians	\$534,074.51
American Medical Ass'n	225,000.00
Other Societies, Organizations, Clinics	216,623.47
Woman's Auxiliary and laymen	90,988.99
(80 Dimes Campaign)	

Interest	\$1,066,686.87
	<hr/>
	6,040.13
	<hr/>
	\$1,072,727.00

To bring this down to the state level, the following figures are for 1955 and 1956.

	1955	1956
Number of Contributors	212	152
Amount of Contributions	\$7,108.25	\$5,756.50
NOTE: Woman's Auxiliary	396.50	385.00

The University School of Medicine received \$8,471.50 from AMEF for the year 1956. The difference between the amount given from South Dakota and the amount received is made up from contributions from alumni living outside the state but designating their money be sent to the S. D. Medical School and from funds that are undesignated, so are divided among the medical schools.

The figures show that there has been a decrease in the number of contributors and the amount of contributions in 1956 from 1955.

In this era of government subsidy, the Committee urges us, the practicing physician, to continue our all out effort to support medical education through our contributions to AMEF and thus ward off government encroachment of our medical schools.

Respectfully submitted,
AMEF Committee
A. P. Reding, M.D., Chr.
A. A. Lampert, M.D.
O. J. Mabee, M.D.
H. L. Saylor, Jr., M.D.
S. F. Sherrill, M.D.

The Committee moves the adoption of the report of the AMEF Committee.

REPORT OF EDITORIAL COMMITTEE

The South Dakota Journal of Medicine and Pharmacy again showed an overall increase of 88 pages during the past fiscal year, due to an increase of 113 pages of advertising. There were more scientific articles and the most gratifying aspect was the fact that articles by South Dakota physicians showed a marked increase. The Editor wrote many personal letters to various members of each of the component District Medical Societies, which resulted in better cooperation and increased efforts to enlist the aid of South Dakota physicians. Most of the members of the Editorial Committee also aided in stimulating this phase of our activities.

Scientific articles, editorials, news items and discussions of problems of medical economics will continue to be welcomed by the Editorial Committee. Our Assistant Editor, Dorothy Anderson Weck, has the heartfelt gratitude of the Editorial Committee and every member of the South Dakota State Medical Association for her zealous efforts to improve our Journal during the past several years. We deeply regret her resignation and realize that it will be very difficult to replace her.

R. G. Mayer, M.D., Chr.
W. E. Jones, M.D.
Harold Lowe, M.D.
Amos Michael, M.D.
Mary Price, M.D.
T. W. Ruel, M.D.
R. E. Van Demark, M.D.
G. J. Van Heuvelen, M.D.
H. R. Wold, M.D.

The Committee moves the adoption of the report of the Editorial Committee and recommends that a letter of commendation be written by the Executive Secretary to Dorothy Anderson Weck.

REPORT OF THE COMMITTEE ON MEDICAL LICENSURE

The Board of Medical and Osteopathic Examiners held their two regular meetings during the year.

The July meeting was held at the Sylvan Lake Resort in the Black Hills where eight physicians wrote the examinations. Four doctors were interviewed by the Board for licensure by reciprocity. Five D. P. physicians were given full licensure after completing four years in an emergency medical area. New officers were also elected. They are as follows: President, F. F. Pfister, M.D.; Vice-President, J. H. Cheney, D.O.; and Secretary-Treasurer, Magni Davidson, M.D.

The Board also endorsed the recommendations of the Attorney General in bringing the South Dakota Medical Practice Act into line with the uniform act recommended by the Federation of Medical Examining Boards.

The January meeting was held in Sioux Falls. There were only two-physicians that wrote the

examinations, and two physicians were interviewed for licensure by reciprocity. Four D. P. physicians were granted full licensure. Hosmer, South Dakota, was declared an emergency medical area by the Board.

Thirteen physicians were granted licensure in South Dakota by reciprocity between the Board meetings.

F. F. Pfister, M.D., Chr.
Magni Davidson, M.D.
C. E. Kemper, M.D.

The Committee moves the adoption of the Report of the Committee on Medical Licensure.

REPORT OF THE COMMITTEE ON VETERANS ADMINISTRATION AND MILITARY AFFAIRS

No meeting of the Committee on Veterans Administration and Military Affairs was held during the year.

Inasmuch as the Military Dependents' Medical Care Plan in South Dakota, and action taken to renew the present intermediary plan for hometown care of Veterans were handled by the Council and other Committees, we endorse the action taken by both groups.

L. C. Askwig, M.D., Chr.
M. R. Gelber, M.D.
F. F. Pfister, M.D.
G. H. Steele, M.D.

The Committee moves the adoption of the Report of the Committee on Veterans Administration and Military Affairs.

REPORT OF THE COMMITTEE ON SPAFFORD MEMORIAL FUND

This award was established by the South Dakota State Medical Association and other friends of Dr. Spafford in recognition of his many years of service as a member of the State Board of Regents of Education and especially his interest in the study of the ancient classics. It consists of the interest on \$1,000.00 and will be awarded to that student who, in the opinion of the Committee, has made most satisfactory progress in the study of Latin, preferably but not necessarily Vergil, during the current school year.

Awarded in 1956 to: Lloyd Ballhagen, Graduate in 1958, sum of \$25.00.

It is not known who will be the recipient of this Award in 1957.

T. E. Eyres, M.D., Chr.

The Committee moves the adoption of the Report of the Committee on the Spafford Memorial Fund.

REPORT OF THE COMMITTEE ON PREPAYMENT AND INSURANCE PLANS

The Committee met once during the year at Huron in January.

The only item that came before the Committee during the year was a referral from the Council on the Time Plan for Group Disability.

The Committee feels that this does not enter into their area of Prepayment Plans so referred it to the Medical Economics Committee.

This Committee is also the Medical membership of the Board of Directors of the South Dakota Medical Service, Inc.

C. J. McDonald, M.D., Chr.
D. H. Breit, M.D.
Paul Hohm, M.D.
E. A. Johnson, M.D.
A. A. Lampert, M.D.
Robert Monk, M.D.

The Committee moves the adoption of the Report of the Committee on Prepayment and Insurance Plans.

REPORT OF THE COMMITTEE ON NATIONAL LEGISLATION

Although the Council appropriated monies for four people to go to Washington to visit with the South Dakota congressional delegation, it was felt that there were no emergency issues to be discussed, and therefore, no trip was necessary.

The Committee recommends that plans for such a meeting be consummated during the year 1957-1958 if felt necessary by the Association president and that appropriate budget items be allowed thereto.

A. P. Peeke, M.D., Chr.
M. M. Morrissey, M.D.
F. F. Pfister, M.D.
A. A. Lampert, M.D.
A. P. Reding, M.D.

The Committee moves the adoption of the Report of the Committee on National Legislation, recommending elimination of the Committee and further recommends that appropriate budget items be allocated to the Standing Committee on Legislation.

REPORT OF THE COMMITTEE ON RURAL MEDICAL SERVICE

In the capacity of chairman of the Rural Medical Service of South Dakota State Medical Association this year, I have answered numerous correspondence for information in regard to rural problems. I attended the 12th National Conference on Rural Health, which was held at Louisville, Kentucky, on the 7, 8 and 9th of March, at the Brown Hotel. This meeting was a very well attended meeting. There were some four or five hundred people. There were people from Public Health Departments of various states, Extension, Farm Bureau, Farm Union, and Farm Grange. There were numerous educators present, members from the American Medical Association, and the Committee Chairmen and the members of the Rural Health Committees of various States. Problems of farm accidents, highway accidents, care of the aged, the problem of dental care among the rural people, and the shortage of dentists in the rural areas were discussed. There were a number of very fine panels. One very important point that was brought out was that there is no such thing as rural medicine or rural dentistry. Medicine as applied to a sick person is just the same whether he lives in the country or the city. It is just a matter of getting the personnel and the facilities available to people in rural areas. Now with the trend of urbanization there is going to be more of a need for the General Practitioner in small groups with Specialists, which will band together in these urban areas or in small towns. The matter of flood control, water supply, and soil erosion was also a matter of great interest.

This year we felt that due to the lack of funds we would not try to put on a Rural Health Conference in the State of South Dakota. However, our committee would be very happy to cooperate with any one who would like to suggest such a meeting.

Respectfully submitted,
A. P. Peeke, M.D., Chr.
E. F. Kalda, M.D.
G. J. Bloemendaal, M.D.

The Committee moves the adoption of the Report of the Committee on Rural Medical Service.

REPORT OF THE COMMITTEE ON NURSING TRAINING

The Nursing Training Committee had no meetings as nothing was brought to the attention of the Committee that required a meeting.

The speaker for the Future Nurses meeting held in Huron in 1956 was arranged for by the Committee for Nursing Training.

The Executive Secretary represented the Association on a Committee to study Nursing Education Legislation, which he reports on in his Legislative activities.

Respectfully submitted,
R. A. Buchanan, M.D., Chr.
J. A. Muggly, M.D.
C. L. Vogele, M.D.

The Committee moves the adoption of the Report of the Committee on Nursing Training.

REPORT OF THE COMMITTEE ON WORKMEN'S COMPENSATION

In accordance with the expressed wishes of the House of Delegates, of the 75th Annual Session of the South Dakota State Medical Association, your Committee made a thorough study of the Workmen's Compensation Law.

The corresponding laws of the States of Colorado, Iowa, Wyoming, Michigan, Minnesota, Montana, Nebraska and North Dakota were reviewed.

The South Dakota program was then considered with reference to five specific areas: medical benefits; compensation; length of disability; choice of physician and distribution of the premium dollar. These categories of the program were compared with those from all of the states of the Union, the District of Columbia and Alaska. Discussions were held with representatives of Labor groups; Officers of the South Dakota Hospital Association and several hospital administrators, to determine areas of mutual interest in the Compensation Act.

With information so obtained, the Committee met in Pierre, on December 2, 1956. The following summary of the facts were made:

1. Inadequacies existed in all of the Compensation Laws studied.
2. Attention was called to some of these inadequacies by the Secretary of Labor, Mr. Mitchell, in November 1956. The Secretary called for remedial actions by the States.
3. The Compensation Law of the State of South Dakota compared favorably with most states, but was inferior to some of them.
4. The extension of Medical Benefits was considered to be the most urgently needed change, and the one most within the province of the Medical Association.
5. Extensive renovation of the Law was considered to be a long-term project, which would require the efforts of several years.
6. The employment of Chiropractors as recommended by certain Labor Groups, as a change in the current Laws, was to be opposed.

The Committee reported this information to the Council, with a recommendation that legislation to increase medical benefits, be introduced in the 35th Legislative Session.

Later, a provision allowing the patient choice of his physician, and another concerning the length of disability were added by other concerned groups. Introduced as H.B. 830, this legislation met with opposition led by the Sunshine Mutual and the Western Surety Insurance Companies, both of Sioux Falls, South Dakota, and a Mr. Murphy, registered as a lobbyist for Morrell and Company of Sioux Falls.

The Committee followed the legislation closely, until it was tabled by the Senate Labor Committee, and believes that the Association should renew its efforts in the 36th Legislative Session.

The Committee directs the attention of the Delegates to the need for a schedule of fees for services rendered under the Compensation Law. At the present, an arbitrary list used by Insurance Carriers, but not officially approved by this Association, is the basis for settlement of claims made by physicians. There appears to be no legal status of this list.

The Committee urges the membership to acquaint itself with the Compensation Law of the State, in order to provide guidance for proper legislative changes, both to improve existing deficiencies, and to provide for additions to the Laws, as required by changes in industry in the State.

Respectfully submitted,
Joseph N. Hamm, M.D., Chr.
Robert Giebink, M.D.
H. R. Lewis, M.D.

The Committee moves the adoption of the report and recommendations of the Committee on Workmen's Compensation.

REPORT OF THE COMMITTEE ON BLOOD BANKS

The Blood Bank Committee of the South Dakota State Medical Association met on several occasions and formulated the following long range suggestions for improving blood transfusion services in South Dakota:

1. A questionnaire should be sent to all hospitals in the State concerning their blood transfusion program.
2. A long-range program should be considered for approval of Blood Banks and Blood Transfusion Program in South Dakota.
3. A voluntary program of testing unknown specimens by hospitals interested should be initiated.
4. The sponsorship of workshops in Blood Banking Procedures by Blood Banks with suitable facilities should be advocated.
5. Greater participation in the North Central Blood Bank Clearing House should be obtained.
6. A Donor Club for the South Dakota State Medical Association should be established.

DISCUSSION:

1. A questionnaire was formulated and was sent to all hospitals in South Dakota. Thirty nine hospitals returned completed questionnaires; a total of 10,126 units of blood were drawn in the preceding year by hospitals furnishing information. Eleven hospitals maintained Blood Banks, that is stored blood. The majority of hospitals which did not maintain Blood Banks used the principle of the Walking Blood Bank, with a total of 22 in this category. Practically all hospitals, performed ABO grouping, but four stated that they did not. Only twelve hospitals did reverse typing for the ABO blood group and this appears to be a serious shortcoming. The Rh₀ (D) typing was done by practically all hospitals and many did typing for other Rh factors; however, only 14 tested for Du.

One hospital did not perform cross typing. Many hospitals performed cross typing technics which are generally considered inadequate. Twelve hospitals used only a saline cross match and two hospitals used only a high protein technic, and these single procedures are not sufficient in light of present blood transfusion knowledge to detect incompatibilities.

Twenty hospitals stated they would like to participate in survey utilizing unknown specimens. Twenty nine hospitals were interested in attending a workshop on blood transfusion technics. The relative low standards of blood transfusion procedures in South Dakota presents a challenge to the medical profession, medical technologists, hos-

pital administrators, and to the members of the South Dakota State Medical Association. It is believed that many of the deficiencies can be corrected by the use of a **voluntary** approval of Blood Transfusion Programs in the State, a **voluntary** program of testing unknown specimens, and sponsorship of workshops in Blood Banking procedures. This Committee believes that the South Dakota State Medical Association is the logical organization to initiate, coordinate, and largely finance a program of this scope. The financial aid required would best be furnished by having a 2-year program with a specific amount of money appropriated for each year for use by the Blood Bank Committee.

The Blood Bank Committee would draw up certain minimum standards for hospital blood transfusion programs. Any hospital wishing to obtain approval would make a request for an inspection to the Executive Secretary's office, and inspections would be carried out under the supervision of the Blood Bank Committee. Travel expenses for physician-inspectors would be paid by the South Dakota State Medical Association (perhaps at the rate of 10 cents per mile). Hospitals approved by N.I.H. or associated with the Minneapolis War Memorial would be automatically approved.

Hospitals wishing approval by the Committee on Blood Banks of the South Dakota State Medical Association would also be obligated to participate in the testing of unknown specimens, and hospitals not approved could also participate in the unknown specimens project. Standards of satisfactory performance would be set by the Blood Bank Committee. The program could be conducted by members of the Blood Bank Committee furnishing specimens, or they could probably be obtained from the Minneapolis War Memorial Blood Bank. The cost of packing, postage, stationery, and any fees paid to reference laboratories should be paid by the South Dakota State Medical Association.

The implications of such a program sponsored by the Association should be carefully considered.

The amount of money to be budgeted by the Association per year to put into operation the Blood Transfusion Approval Program, the Unknown Specimens Program, and three or four Workshops in different parts of the State, and the travel expenses of the South Dakota Medical Association official representative to the North Central District Blood Bank Clearing House in Chicago is estimated to be between \$1,000 and \$1,500. A two-year total of \$2,000 to \$3,000 should be made available to the Committee in May, 1957, if this Committee report is acceptable.

In addition to these programs, it is recommended that the South Dakota State Medical Association membership be covered by a Donor Club. Blood donated in various Blood Banks in the State by members of the Association could be credited for use by any member of the Association, spouse, and dependent children under 21 years of age. Records could be maintained at the Executive Secretary's office and transfer of credits made through the North Central District Blood Bank Clearing House. Your Committee feels that the responsibility for blood procurement is a Community responsibility and that one efficient method of obtaining blood from Community resources is by Donor Clubs. The participation of the Association is such a project would be excellent public relations and demonstrate to the people of South Dakota the medical professions recognition of sound Blood Banking practices.

SUMMARY:

This report requested the approval of the House of Delegates for the Blood Bank Committee of the Association to institute a program of:

1. Voluntary approval of hospital Blood Transfusion Programs.
2. A Program of Testing Unknown Specimens by hospital laboratories.
3. Institution of a series of workshops to medical technologists on Blood Banking procedures.
4. Continue to pay travel expense of the official representative of the Association to the North Central District Blood Bank Clearing House.

Your Committee records that the Budget Committee be asked to appropriate between \$2,000 and \$3,000 for a two-year program as outlined. The cost of such a program is difficult to estimate and it is hoped that \$3,000 for the two-year program will be made available.

The establishment of a Donor Club for the membership of the South Dakota State Medical Association is proposed.

W. A. Geib, M.D., Chr.
R. L. Carefoot, M.D.
A. K. Myrabo, M.D.

The Committee moves the adoption of the report and especially the recommendations of the Committee on Blood Banks, special note being given to the appropriation of \$1,500.00 each year of the two year program as outlined.

REPORT OF THE COMMITTEE ON REHABILITATION

The Rehabilitation Committee held no meetings during the year. Some points were considered during informal discussions.

M. M. Morrissey, M.D., Chr.
A. A. Lampert, M.D.
R. E. Van Demark, M.D.
H. E. Ahrlin, M.D.
Paul Bunker, M.D.

The Committee moves the adoption of the report of the Committee on Rehabilitation.

REPORT OF THE COMMITTEE ON PRESS RADIO CODE

TO: Officers, Delegates, Councilors and Members of the South Dakota State Medical Association.

Your Press-Radio Committee wishes to make the following report for the past year. There was no meeting of the Press-Radio Committee during the past year as there was no need for it. The state officers of the press and radio were again notified of the name of the chairman of the Press-Radio Committee and were requested to send the chairman any complaints they might have. No complaints have been received at the time this report was written. This does not mean that everything is 100% satisfactory. However, it is certainly better than it was before the Press-Radio Code was established.

During the past year a Medical News Service Guide was published and distributed to doctors, hospitals and to the newspapers and radio. This guide is patterned after the one of the Hennepin County Medical Association in Minnesota and serves as a guide for all concerned as to how to interpret the Press-Radio Code. Every new doctor starting practice in South Dakota receives one of these guides from Mr. Foster.

The Committee feels that the Press-Radio Code has been of real value but it will only continue to be so if the doctors conscientiously use the code in their dealings with the press and radio. Every District Society should have a committee on the Press-Radio Code which is responsible for seeing that it works in the localities where there are newspapers and radio stations.

Also, another achievement this year was the fact that the State Hospital Association finally, officially accepted the Code.

Respectfully submitted,
PRESS-RADIO COMMITTEE
R. E. Jernstrom, M.D., Chr.
E. A. Rudolph, M.D.
Steve Brzica, M.D.

The Committee moves the adoption of the Report of the Committee on Press-Radio Code.

REPORT OF THE COMMITTEE ON CARE OF THE INDIGENT

The Committee met once during the year and conducted a survey of physicians, county commissioners, and county auditors on the extent of indigent care in various counties.

The chairman and the executive secretary met with representatives of a multi-county commissioners group in Salem and the executive secretary spoke on the subject at the state convention of County Commissioners.

During the legislative session, on direction of the Council, the Association worked for passage of an indigent care program for recipients of Old Age Assistance, Aid to Dependent Children, Aid to Disabled and Aid to the Blind. Legislation authorizing the programs was passed, but no appropriation made.

The Committee recommends that studies and efforts be continued to 1: Implement the establishment of an indigent care program for categorical assistance recipients through the state welfare department and the executive office. 2: Establish a uniform fee schedule for indigent care.

H. P. Adams, M.D., Chr.
A. P. Peeke, M.D.
H. Russell Brown, M.D.
F. F. Pfister, M.D.
P. V. McCarthy, M.D.
E. J. Perry, M.D.
F. C. Totten, M.D.
W. A. Delaney, Jr., M.D.

The Committee moves the adoption of the report and recommendations of the Committee on Care of the Indigent.

REPORT OF THE COMMITTEE ON CORONER'S LAW

The Committee met on several occasions during 1956, once with representatives of the Funeral Directors.

A Post Mortem Examination Bill was drawn up patterned after a Model Law and the present Arkansas Law. The Bill passed the House late in the session and died in the Senate Public Health Committee when there was not sufficient time for study of the Bill. The Bill had extensive rewriting from the original form in which it was introduced.

Your Committee recommends that continued study be given to Post Mortem Examination Bills and to again introduce a Bill to the 1959 Legislature.

W. A. Geib, M.D., Chr.
M. M. Morrissey, M.D.
R. H. Hayes, M.D.

The Committee moves the adoption of the report and recommendations of the Committee on Coroner's Law.

REPORT OF THE COMMITTEE ON CIVIL DEFENSE

No meeting held this year.

L. C. Askwig, M.D., Chr.
N. E. Mattox, M.D.
G. J. Bloemendaal, M.D.

As no report of the Committee on Civil Defense is made, it is felt by the Committee that information should be given relative to work done by various districts in relation to Civil Defense and disaster plans.

REPORT OF THE COMMITTEE ON SCHOOL HEALTH

While parents have the primary responsibility for the health of their children, the health efforts of schools, health departments and other agencies should be so conducted as to help parents recognize and assume their responsibilities. Every school should have the services of a physician available as a consultant on health problems. Cooperation of many individuals and groups is needed to coordinate the efforts of those concerned with child health.

From reports received from various sections of the State one can conclude that most of the larger centers in South Dakota have a more or less adequate program on communicable disease control, including immunization procedures, and established health and safety measures to protect participants in physical education and athletics. However, much remains to be done to aid in the establishment of health appraisal standards, including standards for medical examinations, observation and screening. The Medical profession should assist in the development of adequate cumulative health records and facilitation of the proper interpretation of data among school, family doctor and parents.

R. G. Mayer, M.D., Chr.
N. E. Wessman, M.D.
David Buchanan, M.D.

The Committee moves the adoption of the report and recommendations of the Committee on School Health.

REPORT OF THE COMMITTEE FOR IMPROVEMENT OF PATIENT CARE

No report.

R. Delaney, M.D., Chr.
M. Sanders, M.D.
C. Voegelé, M.D.
C. F. Gryte, M.D.
J. A. Muggley, M.D.
R. A. Buchanan, M.D.

As no report of the Committee on Improvement of Patient Care is made, it is felt by the Committee that information should be given relative to work done by various Districts in relation to the Improvement of Patient Care.

REPORT OF THE COMMITTEE ON MEDICOLEGAL CONFERENCE

The Medicolegal Conference Committee met on August 4, in Sioux Falls and again on October 6 in Huron to discuss meeting plans for the Medicolegal Conference. Present at all or part of these meetings were: Dr. Hohm, Swanson, Brogdon, Lawyers: Evans, Fellows and Campbell.

Plans were made for a Medicolegal convention which was held January 26 and 27 at the Marvin Hughitt Hotel in Huron. The Program consisted of the following speakers:

Welcome—Dr. A. P. Peeke
Welcome—Hon. Herbert B. Rudolph
Professional Liability—C. F. Branton
Medical Examiners Law—Wayne Geib, M.D.
Film by the Law Dept. of the AMA—E. G. Holman
Pet Peeves—Chr. Boyd Benson
Banquet Speaker—Hon. G. T. Mickelson
"The Doctor's Duty in Law Enforcement"—J. R. Brady
"Relationship of Trauma to Neurosis"—C. G. Baker
"Problem Injuries of the Extremities"—R. E. Van Demark, M.D.

Question & Answer Period conducted by Dwight Campbell

The Interprofessional Code—Ellsworth Evans
The convention was highly successful. A code of Ethics was approved by both professions and will be presented to the State Medical Association and the State Bar Association for final approval.

C. Swanson, M.D., Chr.
T. Hohm, M.D.
P. P. Brogdon, M.D.

The Committee moves the adoption of the report of the Committee on Medico-legal Conference and recommends the commendation of the interested parties for their efforts and interest.

DISTINGUISHED SERVICE AWARDS

Started in 1951

1952—H. Russell Brown, M.D., Watertown
1953—Guy Van Demark, M.D., Sioux Falls
1954—J. C. Ohlmacher, M.D., Vermillion
1955—R. G. Mayer, M.D., Aberdeen
1956—J. C. Ohlmacher, M.D., Vermillion
1957—W. E. Donahoe, M.D., Sioux Falls
1957—Mrs. Lucille Dory, Watertown

FIFTY YEAR CLUB MEMBERS

C. S. Bobb, M.D., Mitchell
J. L. Chassell, M.D., Belle Fourche
A. H. Christiansen, M.D., Clark, Illinois
F. L. Class, M.D., Huron
M. E. Cogswell, M.D., Wolsey
W. D. Farrell, M.D., Aberdeen
F. W. Freyberg, M.D., Mitchell
E. E. Gage, M.D., Sioux Falls
E. H. Grove, M.D., Arlington
A. P. Hawkins, M.D., Waubay
J. A. Hohf, M.D., Yankton
A. H. Hoyne, M.D., Salem
A. S. Jackson, M.D., Rapid City
R. J. Jackson, M.D., Hot Springs
J. A. Jacotel, M.D., Milbank
G. T. Jordan, M.D., Vermillion
G. H. Miller, M.D., Spearfish
T. P. Ranney, M.D., Aberdeen
F. A. Richards, M.D., Sturgis
T. F. Riggs, M.D., Pierre
H. L. Saylor, M.D., Huron
F. W. Valkennar, M.D., Chancellor
C. H. Weisshaar, M.D., Aberdeen
E. A. Wilkinson, M.D., Highmore
O. R. Wright, M.D., Huron

South Dakota Medical Association Roster-1957

Membership by Districts

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Cooley, F. H. Aberdeen
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Bartron, H. J., Jr. Clark
Brakss, V. Castlewood
Brewster, C. B. Watertown
Campbell, D. F. (M.S.)
Watertown

*Christianson, A. H. Illinois
Clark, C. J. Watertown
*Crawford, J. H. Watertown
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Kilgard, R. M. Watertown
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Horthy, K. Kennebec

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Wessington Springs
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Becker, S. _____ Sioux Falls
Billingsley, P. R. _____ Sioux Falls
Billion, T. J., Jr. _____ Sioux Falls
Borris, R., (M.S.) _____ Valley Springs
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Brzica, S. M. _____ Sioux Falls
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Burns, K. R. _____ Sioux Falls
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Clark, J. C. _____ Sioux Falls
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Cutshall, V. H. _____ Sioux Falls
Dehli, H. M. _____ Colton
Devick, J. C. _____ Colton
DeWitt, W. _____ Sioux Falls
Dickinson, J. _____ Canistota
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Donahoe, R. R. _____ Sioux Falls
Donahoe, S. A. _____ Sioux Falls
Donahoe, W. E. _____ Sioux Falls
Driver, D. R. _____ Sioux Falls
Duimstra, F. _____ Sioux Falls
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Eiringer, I. _____ Sioux Falls
Ensborg, D. _____ Sioux Falls
Erickson, E. _____ Sioux Falls
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Farrell, H. W. _____ Sioux Falls
Fisk, R. G. _____ Dell Rapids
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*Gage, E. E. _____ Sioux Falls
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Greenfield, D. _____ Sioux Falls
Greenfield, R. E. _____ Sioux Falls
Greenough, E. E. _____ Sioux Falls
Gregg, J. B. _____ Sioux Falls
Groebner, O. A. _____ Sioux Falls
*Grove, A. F. _____ Dell Rapids
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Hage, W. _____ Sioux Falls
Hansen, H. F. _____ Sioux Falls
Hermanson, J. M. _____
Valley Springs
Hofer, E. J. _____ Freeman
Hoskins, J. H. _____ Sioux Falls
*Hummer, H. R. _____ Sioux Falls
Hyden, A. _____ Sioux Falls
Ihle, C. W. _____ Sioux Falls
Jameson, G. M. _____ Sioux Falls
Jones, W. L. _____ Sioux Falls
Kahler, E. S. _____ Sioux Falls
Kaufman, I. I. _____ Freeman
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Knowles, R. C. _____ Sioux Falls
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Leraan, L. G. _____ Sioux Falls
Lietzke, E. T. _____ Beresford
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Mitchell, C. B. _____ Sioux Falls

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Nelson, R. E. _____ Sioux Falls
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Van Demark, R. E. _____ Sioux Falls
Van Demark, W. E. _____ Sioux Falls
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*Zimmerman, Goldie, E. _____
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Auld, M. A. Yankton
Baker, Cecil Yankton
Baum, O. Yankton
Berg, S. Tyndall
Dregseth, K. Yankton
Eyres, T. E. Vermillion
Faithe, Margaret Wakonda
Fairbanks, W. H. Vermillion
Foley, R. J. Tyndall
Glood, D. Viborg
Grover, W. W. Yankton
Haas, F. W. Yankton
*Hohf, J. A. Yankton

Hubner, R. F. Yankton
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Moore, E. J. Vermillion
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Price, Ronald Armour

Price, T. P., Jr. Yankton
Ranney, B. Yankton
Reaney, D. B. Yankton
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Riesberg, H. Yankton
Sattler, T. H. Yankton
Stanage, W. F. Yankton
Steele, J. P. Yankton
Sydow, H. Yankton
Thompson, R. F. Yankton
Tidd, J. T. Yankton
Villa, J. P. Freeman
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Behrens, C. L. Rapid City
Borgmeyer, H. J. Rapid City
Boyce, R. A. Rapid City
Bradshaw, F. J. Ft. Meade
Bray, R. B. Rapid City
Brownell, M. E. Rapid City
Butler, J. M. Valley Springs
Byrne, J. R. Edgemont
Cameron, D. E. Rapid City
Chassell, J. L. Belle Fourche
Chu, C. L. Sanator
Clark, B. S. Spearfish
Clark, C. A. Lead
Crane, H. L. Washington, D. C.
D'Arata, F. J. New Underwood
Davidson, H. E. Lead
Dawley, W. A. Rapid City
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Dillion, J. A. (M.S.) Rapid City
Driver, I. E. Rapid City
Dulaney, C. H. Ft. Meade
Edyvean, W. H. Deadwood
Elston, J. Rapid City
Erickson, J. W. Rapid City
Feehan, J. J. Rapid City
*Fleegeer, R. B. Lead
Geib, W. Rapid City
Gilbert, F. J. Belle Fourche
Grau, H. J. Rapid City
Hamm, J. N. Sturgis

Hare, H. J. Rapid City
Hare, Lyle Spearfish
Heidepreim, G. Rapid City
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Hesz, A. B. Hill City
Hollerman, W. W. Rapid City
Howe, F. S. Deadwood
Hvam, Ole Quinn
*Jackson, A. S. Lead
*Jackson, R. J. Rapid City
Jacobson, T. R. Hot Springs
Jernstrom, R. E. Rapid City
James, Frank Lead
Johnson, C. A. Belle Fourche
Jones, W. E. Sturgis
Kegaries, D. L. Rapid City
Koren, Paul Rapid City
Lampert, A. A. Rapid City
Leeds, J. F. Hot Springs
Lemley, R. E. Rapid City
Lydiatt, J. Hot Springs
Marousek, M. Belle Fourche
Mattox, J. E. Deadwood
Mattox, N. E. Deadwood
Mead, T. Spearfish
Merryman, M. P. Rapid City
Meyer, W. L. Sanator
Mills, G. W. Wall
*Miller, G. H. Spearfish
*Morse, W. E. Rapid City
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*Owen, N. T. Rapid City
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Ruud, E. T. Rapid City
Saxton, A. J. Rapid City
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Theissen, H. H. Rapid City
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Whitney, N. R. Rapid City
Williams, F. R. Rapid City
Wood, G. F. Rapid City
Yackley, J. V. Rapid City
Zarbaugh, G. F. Deadwood

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Rosel, R. W. Burke

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Lakstigala, Peter .. White River

Staats, R. E. Washington, D. C.
Studenberg, J. E. Winner
Zeidak, O. Burke

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Lowe, J. A. Mobridge

Nolan, B. P. Mobridge
Spiry, A. W. Mobridge
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Zandersons, Vilas Herried

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Brinkman, W. C. Sisseton
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*Jacotel, J. A. Milbank
Johnson, E. A. Milbank
Judge, W. T. Milbank
Karlins, W. H. Webster

Keller, L. W. Webster
Lie, Dagfinn Webster
Lovering, J. Sisseton
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*Indicates Honorary Member

M.S. Indicates Military Service

Roster-South Dakota Medical Association-1957

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 Anderson, J. A. _____ Madison
 Anderson, T. _____ Sioux Falls
 Anderson, W. R. _____ Sioux Falls
 Argabrite, J. W. _____ Watertown
 Angelos, T. _____ Canton
 Arneson, W. _____ Sioux Falls
 Askwig, L. C. _____ Pierre
 Aspaas, P. K. _____ Dell Rapids
 Auld, C. V. _____ Plankinton
 Auld, M. A. _____ Yankton
 Auld, Marian L. _____ Yankton
 Auskaps, R. _____ Lake Norden
 Austin, D. C. _____ Brookings
 Avots, Avotins, K. _____ Carthage
 Avotins, R. _____ Faulkton
 Bailey, J. D. _____ Rapid City
 Baker, C. E. _____ Belle Fourche
 Baker, Cecil _____ Yankton
 Barnett, G. L. _____ Sioux Falls
 Bartron, G. R. _____ Watertown
 Bartron, H. J., Jr. _____ Watertown
 Baughman, D. S. _____ Madison
 Baum, Otto _____ Yankton
 Becker, S. _____ Sioux Falls
 Behrens, C. L. _____ Rapid City
 Bell, George _____ De Smet
 Benjamin, M. B. _____ Michigan
 Berbos, J. N. _____ Aberdeen
 Berg, S. _____ Tyndall
 Berzins, R. _____ Bowdle
 Billingsley, P. R. _____ Sioux Falls
 Billion, T. J., Jr. _____ Sioux Falls
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 Boyce, R. A. _____ Rapid City
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 Brauer, H. H. _____ Sisseton
 Bray, R. B. _____ Rapid City
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 *Brenckle, J. F. _____ Mellette
 Brewster, C. B. _____ Watertown
 Brinkman, W. C. _____ Sisseton
 Brogdon, P. P. _____ Mitchell
 Brzica, S. M. _____ Sioux Falls
 Brown, H. R. _____ Watertown
 Brownell, M. E. _____ Rapid City
 *Bruner, J. E. _____ Aberdeen
 Buchanan, D. _____ Huron
 Buchanan, R. A. _____ Huron
 Bunker, P. G. _____ Aberdeen
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 Burns, E. A. _____ Sioux Falls
 Burns, K. R. _____ Sioux Falls
 Butler, J. M. _____ Hot Springs
 Byrne, J. R. _____ Edgemont
 Calene, J. L. _____ Aberdeen
 Cameron, D. E. _____ Rapid City
 Campbell, D. F. (M.S.) _____ Watertown


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 *Christianson, A. _____ Illinois
 Chv, C. L. _____ Sanator
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 Clark, C. A. _____ Lead
 Clark, C. J. _____ Watertown
 Clark, F. J. _____ Gregory
 Clark, J. C. _____ Sioux Falls
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 Currie, K. P. _____ Britton
 Cutshall, V. H. _____ Sioux Falls
 D'Arata, E. J. _____ New Underwood
 Damm, W. P. _____ Redfield
 Davidson, H. E. _____ Lead
 Davidson, M. _____ Brookings
 Dawley, W. A. _____ Rapid City
 Dean, Roscoe _____ Wess. Springs
 Dehli, H. M. _____ Colton
 Delaney, R. _____ Mitchell
 Delaney, W. A., Jr. _____ Mitchell
 Devick, J. C. _____ Colton
 DeWitt, W. _____ Sioux Falls
 *Dick, L. C. _____ Spencer
 Dickinson, J. _____ Canistota
 Dillon, J. A. (M.S.) _____ Rapid City
 Donahoe, J. W. _____ Sioux Falls
 Donahoe, R. R. _____ Sioux Falls
 Donahoe, S. A. _____ Sioux Falls
 Donahoe, W. E. _____ Sioux Falls
 Dregseth, K. _____ Yankton
 Drissen, E. M. _____ Britton
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 Driver, I. E. _____ Rapid City
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 Eggers, M. W. _____ Sioux Falls
 Ehik, G. _____ Sioux Falls
 Eirinberg, I. _____ Sioux Falls
 Elston, J. _____ Rapid City
 *Elward, L. R. _____ Doland
 Ensberg, D. _____ Sioux Falls
 Erickson, J. W. _____ Rapid City
 Eyres, T. E. _____ Vermillion
 Fairbanks, W. H. _____ Vermillion
 Farrell, H. W. _____ Sioux Falls
 *Farrell, W. D. _____ Aberdeen
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 Fisk, R. G. _____ Dell Rapids
 Fisk, R. R. _____ Flandreau
 *Fleeger, R. B. _____ Lead
 Flynn, E. _____ Pierre
 Foley, R. J. _____ Tyndall
 Friefeld, S. _____ Brookings
 Fox, S. W. _____ Pierre
 *Gage, E. E. _____ Sioux Falls

Gargas, B. R. _____ Sioux Falls
 Geib, W. A. _____ Rapid City
 Gelber, M. R. _____ Aberdeen
 Giebink, R. R. _____ Sioux Falls
 Gilbert, F. J. _____ Belle Fourche
 Gillis, F. D., Jr. _____ Mitchell
 Glood, D. _____ Viborg
 Gorder, Wm. _____ Aberdeen
 Grau, H. J. _____ Rapid City
 Green, C. D. _____ Iowa City, Ia.
 Green, R. D. _____ Sioux Falls
 Greenfield, D. _____ Sioux Falls
 Greenfield, R. E. _____ Sioux Falls
 Greenough, E. E. _____ Sioux Falls
 Gregg, J. B. _____ Sioux Falls
 Gregory, D. A. _____ Milbank
 Groebner, O. A. _____ Sioux Falls
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 Grove, M. S. _____ Sioux Falls
 Grover, W. W. _____ Yankton
 Gryte, C. F. _____ Huron
 Haas, F. W. _____ Yankton
 Hagan, A. S. _____ Faulkton
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 Hagin, J. C. _____ Miller
 Hamm, J. N. _____ Sturgis
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 Hare, Lyle _____ Spearfish
 Hayes, R. H. _____ Winner
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PHARMACEUTICAL

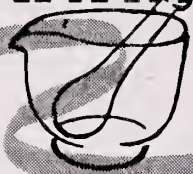
SECTION

HAROLD S. BAILEY, PH.D.

EDITOR

Division of Pharmacy
College Station, South Dakota

PHARMACEUTICAL *Paper*



MERCHANDISING AND ADVERTISING THE ANIMAL HEALTH DEPARTMENT*

by

R. D. Watson**

Fort Worth, Texas

As we all know, these are changing times and so long as the world exists I believe we will have changing times. Changes are not necessarily always for the good; but the one which I would like to discuss is a good one for pharmacists if proper care is taken.

Some 20 or 30 years ago the farmer was not so well educated as he is today, an eighth grade education was about average. Today we have many farmers who are college graduates. These men read more and naturally know much more about their livestock and poultry than did their fathers and they want to take better care of their animals.

Also, some 20 or 30 years ago livestock was not shipped so universally and diseases were somewhat confined to an area or state. Today animals are shipped everywhere and as a consequence diseases that once were confined to an area now are widespread. Erysipelas once was thought of as confined to South Dakota, Minnesota, Iowa and Nebraska. Now it is seen everywhere. Vesicular exanthema hogs were found in 16 states within 2 weeks after passing through the Omaha stockyards. These are two examples of how diseases spread today.

Up to 10 or 15 years ago we did not have drugs with which we could treat an animal and expect good results. Therefore, many

sick animals were left to die or recover on their own or they were sent to market. For these reasons large animal health departments were not so widespread and common as we see them today. Sales were largely tonic powder, serums and virus, bacterins and dip, chicken tablets and powders.

With the advent of sulfonamides this picture was changed and as time has progressed since the sulfonamides we have seen the advent of newer and better vaccines, serums, antibiotics, newer and better insecticides, anthelmintics, weed and garden sprays, etc.

These facts mean then that today's farmer in general is better educated and more apt to treat his sick animals and poultry. They also mean that he probably has more diseases to contend with than did his father and grandfather. However, he also has the drugs and products to work with that will give him results he wants. To you, the pharmacist, this means that today's farmer offers you a greater sales potential for vaccines, serums, sulfas, antibiotics, insecticides, instruments, worming products, remedies, etc., than ever before.

Pharmacy or Variety Store

Who is going to take care of this new business? The drug store is the natural place the farmer will go to purchase drugs. You are professionally trained to handle and dispense them. The traffic will go there first and continue to go there if proper care is taken. It is this point I want to particularly discuss

*Presented at the Pharmaceutical Institute, Division of Pharmacy, South Dakota State College, April, 1957.

**Assistant General Sales Manager, Globe Laboratories.

with you today — the merchandising and advertising of an animal health department in the drug store. The promotion and merchandising of an animal health department is very important because the pharmacist has a lot of outside competition today that once didn't exist. He has seen new types of competition in the grocery store, the variety store, the feed store, hatchery, door-to-door salesmen, co-op, etc. These forms of competition are not nearly so apt to do animal health business if the pharmacist conducts this department properly.

The veterinary department is here to stay and it should be recognized as such by the pharmacist today and put in as a department in the pharmacy. Most of you have done that, I am sure. Also, throughout the country pharmacy colleges are teaching more and more basic veterinary courses in their curriculum. This is most gratifying and important if we are to keep this on a professional level and in the pharmacy where it rightfully belongs. If you are in an area where you have veterinary potential, put in an animal health department and work to build this business. If you don't, then some non-drug outlet will start stocking and selling animal health products; and once they capture the market it won't be easy to get it back. Experience has given us a few simple rules which should be followed to properly build an animal and poultry health department in your pharmacy and an animal and poultry clientele for your store. First, let us consider some rules of merchandising.

Rules of Merchandising

1. Learn what products your territory has a demand for — as swine products, sheep, poultry, dairy cattle, beef cattle, horses, insecticides, etc. You can get this information from your county agent, vocational agriculture instructors, veterinarians in some cases, farmer friends, and drug salesmen who call on you.

2. Select a line or perhaps two lines to feature in your department and then stock an ample and complete stock of the products for which you should have demand.

3. Put in a stock of veterinary instruments that should sell and display them prominently on a peg board display.

4. Put all your veterinary merchandise in a

department — preferably toward the back of the store where a farmer or rancher can browse a little — out of the traffic. Build the department close to the prescription area, if you will be the one to look after it largely. Include the refrigerator and instrument display in the department and identify the department with some kind of a sign which can be readily seen from front of store.

5. Keep a window display featuring animal health products a good share of the time if you have windows to trim.

6. Thoroughly acquaint yourself with the products you sell, diseases, vaccines, serums and bacterins so you can intelligently discuss these with your farmer customers. This information can be gained from many places, such as manufacturers' representatives, reading manufacturers' literature and books, attending meetings such as these, educational meetings sponsored by manufacturers, state college, extension bulletins, talking with farmers, county agents, and the veterinary sections of the Drug Red Book and Blue Books.

7. Plan to wait on the animal health customers yourself or designate some male clerk to have this responsibility. Farmers and ranchers, as a rule, prefer to buy their animal health products from men.

How to Advertise Your Department

1. First and most important is the use of the advertising aids made available to you by the manufacturer whose line you sell. Through them you can get:

- a. Veterinary calendars
- b. Folders
- c. Direct mailing postal cards
- d. Direct mailing broadsides
- e. Handbooks to distribute
- f. Store display material

2. Farmer consumer meetings. You arrange the meetings and manufacturer's representatives will put on the program.

3. Displays at county fairs and other farmer meetings.

4. Newspaper ads daily or weekly and local radio station spots.

5. Work with local 4-H and FFA groups.

6. Work with the county agent.

7. Make calls directly on farmers.

8. Work with local G. I. veteran groups.

(Continued on Page 339)

PHARMACEUTICAL *Paper*



SURFACE ACTIVE AGENTS*

by

N. E. Webb, Ph.D.**

Brookings, South Dakota

Before entering into a discussion of the use of surface active agents, we should first review the meaning of basic terms. Quantitatively **surface tension** is the force in dynes acting in the surface at right angles to any (imaginary) line one cm. in length. Qualitatively this force can be thought of as being a greater attraction between similar molecules (for example water) than the attraction between dissimilar molecules (for example air and water). A **surface active agent**, or **surfactant**, then, is any substance capable of altering the attraction between dissimilar molecules.

Although the actual force of surface tension is invisible, we can see the results of this force or attraction. For example, if a globule of aniline is suspended in water having the same specific gravity as aniline due to the addition of KCl, the aniline will assume the form of a sphere. That is, it will exhibit a minimum of surface area. The greater mutual attraction of the aniline molecules for each other is sufficient to cause this sphere formation. This is more properly called **interfacial tension**, the term surface tension being reserved for gas-liquid interfaces.

*Presented at the Pharmaceutical Institute, Division of Pharmacy, South Dakota State College, April 1957.

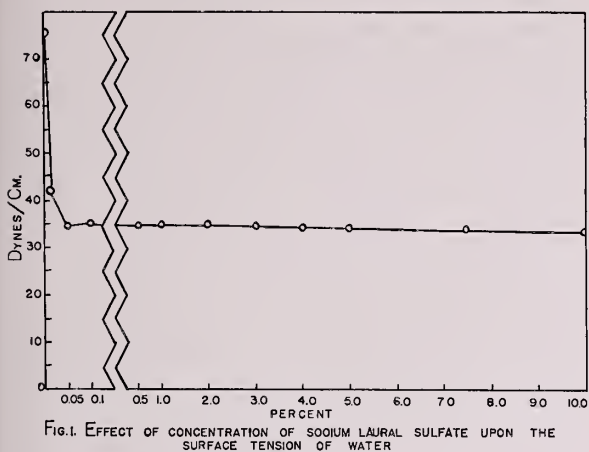
**Associate Professor of Pharmacy, South Dakota State College.

Types of Surfactants

Surface active agents can be classified into three distinct groups; (1) anionic, in which the anion or acid radical is the surface active group, (2) cationic, in which the cation or the basic radical is surface active, and (3) non-ionic, those that do not ionize to any appreciable extent in water. Soluble soaps and our modern washday detergents are good examples of anionic surface active agents. The soaps may be characterized by the general formula $\text{RCOO}^- + \text{Na}^+$ which ionizes in solution to $\text{RCOO}^- + \text{Na}^+$. The quaternary ammonium compounds are the best examples of cationic surfactants. The general formula for these compounds may be represented as follows: $[\text{N}(\text{R}^1, \text{R}^2, \text{R}^3, \text{R}^4)]^+ \text{X}^-$ where $\text{R}^1, \text{R}^2, \text{R}^3, \text{R}^4$ are mixed aliphatic or aromatic groups and X represents the anion, eg., Cl^- , SO_4^{2-} , Br^- , etc. Of course, n varies with the valence of the anion. We cannot write a general formula for non-ionic surfactants since there are so many different types. The best we can do is state that they are composed of one or more hydrophilic (water loving) groups in combination with one or more lipophilic (oil loving) groups. Cetyl and stearyl alcohols are specific examples of non-ionic surfactants.

We have at various times heard the expression that "a little goes a long way." This

is certainly true in regard to the effect of surfactants upon the surface tension of water. As shown in Figure 1, the normal surface



(Figure 1)

tension of water is approximately 76 dynes/cm. Using increasing concentrations of sodium lauryl sulfate, a typical example of an anionic detergent (Duponol C, Irium, Gardinol WA), we see that the surface tension has been lowered to approximately 43 dynes/cm. at a concentration of 0.1% (1:10,000). At a concentration of 0.05% (1:2,000) the surface tension is only lowered to approximately 35 dynes/cm. From this point on as the concentration of the sodium lauryl sulfate increases to the point of saturation, there is no significant change in the surface tension.

Practical Applications

The principle uses of surfactants lie in the field of pharmacy. There are, however, a few important medicinal uses. For example, 'Colace' (Mead Johnson, sodium dioctylsulfosuccinate) and 'Dorbantyl' suspension (Schenley, sodium dioctylsulfosuccinate with 'Dorbane') are being used extensively for the prevention and treatment of constipation. They are non-irritating and do not stimulate peristalsis. They lower the surface tension of interstitial water allowing better mixing with fecal material. In external preparations surfactants are used to increase the absorption and therefore the effectiveness of certain medicinal agents. For example, the inclusion of Polysorbate 80, U.S.P., (Atlas Powder Co., Tween 80), a non-ionic surfactant, in Coal Tar Ointment, U.S.P., has made it possible to reduce the percentage of coal

tar from 5% to 3%. Benzaekonium Chloride, U.S.P., and Benzethonium Chloride, U.S.P., both cationic surfactants of the quaternary ammonium type, are antibacterial agents used for preoperative disinfection, wound disinfection, and wound irrigation.

Surfactants are of value to pharmacy because of their wetting and dispersing ability, their solubilizing effect upon essential oils, their ability to either produce or prevent the production of foam, and their usefulness as emulsifying agents.

The use of a surfactant as a wetter can be illustrated by the use of sodium lauryl sulfate to wet sulfur prior to its suspension in a methocel solution. Without the wetting agent part of the sulfur will not be wetted and will float on the surface. The remainder of the sulfur will eventually form a compact mass in the bottom of the container and can be re-suspended only after considerable shaking.

An analogous effect can be shown upon the addition of water to Benzoin Tincture previously mixed with an equal volume of Tween 20 (Atlas). Using this particular non-ionic surfactant, a milky dispersion of the benzoin in fine particulate size is obtained. Ordinarily with the addition of Benzoin Tincture to water or vice versa a considerable amount of clumping occurs even if the tincture is added drop by drop with continuous stirring. Upon standing there is a complete precipitation of the benzoin particles unless a surfactant is used.

The ability to solubilize an essential oil can be of considerable value to the practicing pharmacist. It is infrequent that a physician will prescribe an aromatic water as a vehicle for a prescription, and therefore it is not practical to have stock containers of aromatic waters on hand. With the use of certain surfactants an acceptable aromatic water can be prepared within a matter of a few minutes. All that is required is the necessary amount of volatile oil (2 ml./1000 ml.) and from five to ten parts of Tween 20 or similar non-ionic surfactant. Mix the volatile oil with the Tween 20 and then add the required amount of water. Shaking is not recommended due to the undesirable production of foam. Aromatic waters prepared in this manner are actually colloidal solutions having the desired appearance of true solutions.

Surface active agents play an important role in both the production of and the prevention of foam. In most, if not all, cases foam in pharmaceutical preparations is not desirable. Therefore, we are more interested in the prevention of foam. Such agents as Span 20, Span 80, and Span 85 (Atlas), all non-ionic surfactants, have been found to be effective in foam reduction. The problem of foaming is one that has not been completely solved by any means particularly in regard to pharmaceutical preparation, and considerable research is needed in this field.

Perhaps the most important pharmaceutical use of surface active agents is their value as emulsifying agents. There are numerous emulsion preparations official in the U.S.P. and N.F., most of which require either the addition of a surfactant as in the case of Hydrophilic Ointment, U.S.P., or the formation of a surfactant by chemical reaction as in the case of Rose Water Ointment, U.S.P.

Emulsion Formulation

In the formulation of emulsions the choice of a proper emulsifying agent is usually a matter of trial and error. Recently a systematic method for the selection of emulsifying agents was developed by the Atlas Powder Company. This system is known as the "HLB system of emulsifier selection." The immediate disadvantage of the system is that it is applicable only to non-ionic surface active agents. It is, however, a step in the right direction and gives surprisingly good results when properly used.

The term HLB is an abbreviation for Hydrophile-lipophile balance. Each surface active agent is composed of one or more hydrophilic groups in combination with one or more lipophilic groups. The ratio and size of one to the other is a deciding factor as to whether a w/o or an o/w emulsion is produced. An empirical number has been given

to each Atlas surfactant representing its hydrophile-lipophile balance. These assigned numbers range from 1 to about 18. The lower the HLB value, the more lipophilic (oil loving) is the material, and conversely, the higher the HLB value the more hydrophilic (water loving) is the agent. Generally speaking those agents with HLB values between 3.5 and 6.0 will cause the formation of w/o emulsions. Those with HLB values ranging from 8 to 18 will cause the formation of o/w emulsions. For solubilization of essential oils an HLB value of from 15 to 18 is required.

To further simplify emulsifier selection a required HLB value was assigned to each type of substance that might be used in the oil phase of an emulsion. The required HLB value varies according to whether one wishes to prepare a w/o or an o/w emulsion. For example, to prepare a w/o emulsion with anhydrous lanolin, a surfactant with an HLB value of 8 is required. To prepare an o/w emulsion with lanolin, however, requires an HLB value of 15. For mineral oil or petrolatum w/o emulsions the required HLB value is 4, and for o/w emulsion with these substances the required HLB value is 10.

How, then, do we select the proper emulsifier when two or more constituents make up the oil phase of our emulsion? This problem can be solved by simple mathematics as shown in the following illustration.

The total percentage of the oil phase is 34. The proportion of each ingredient is multiplied by its respective required HLB value. The sum of these products then is equal to the required HLB value for the mixture for the preparation of an o/w emulsion.

The Atlas laboratories have found that the best results are obtained by blending a low HLB value surfactant with a high HLB value surfactant. A few simple calculations are again necessary to determine the HLB value of the blend. For example, in the above for-

O/W EMOLLIENT CLEANSING LOTION

Ingredient	Percent	Required HLB		Calculation
Exp. Almond Oil	30	10	x	30/34 = 8.8
Stearic Acid	2	17	x	2/34 = 1.0
Anhydrous Lanolin	2	15	x	2/34 = 0.9
	34			10.7
Emulsifier	7			
Perfume	q.s.			
Alcohol	2			
Purified Water	57			

mula we wish to use a total of 7% emulsifier with an HLB value of approximately 10.7. The actual percent of emulsifier required for best results can only be determined by trial and error. Arbitrarily selecting a combination of Tween 60 and Span 60 we see by the following calculations that a blend of 60% Tween 60 and 40% Span 60 gives a combined HLB value of 10.85.

	HLB	Percent	
Tween 60	14.9	x	60 = 8.95
Span 60	4.7	x	40 = 1.90
			<hr/> 10.85

The required HLB value determined for an oil phase should only be used as a guide to emulsifier selection since emulsifier blends with HLB values close to either side of the required HLB value may be used. The results will vary with different emulsifying agents due to the chemical nature of the substances comprising the oil phase of the emulsion.

The following formula for a cooling back lotion further illustrates the use of the HLB system. This particular preparation is designed for use as a substitute for rubbing alcohol which has a tendency to dry out the skin. Preparations similar to this one are in common use in almost every hospital.

COOLING BACK LOTION (O/W)

Ingredient	Percent	Required HLB	Calculation
Anhydrous Lanolin	5	15 x 5/9	= 8.3
Stearic Acid	1	17 x 1/9	= 2.0
Stearyl Alcohol	1	14 x 1/9	= 1.6
Olive Oil	2	10 x 2/9	= 2.0
	<hr/> 9		<hr/> 13.9
Emulsifier			
Span 20	0.7%	8.6 x 35%	= 3.0
Tween 20	1.3%	16.7 x 65%	= 10.9
Propylene Glycol	5.0		
Menthol	0.1		13.9
Alcohol	5.0		
Purified Water	78.9		

Preparation: Heat the oil phase to 70°C. including the Span 20. Heat the water phase to 70°C. including the Tween 20. Pour the oil phase into the water phase in a continuous stream with stirring. When cool, add the menthol previously dissolved in the alcohol. Homogenize if necessary.

The use of surface active agents in pharmaceutical formulations is still a relatively new field. Through research these compounds will find greater use in medicine and pharmacy in the future.

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ADDICTIVE DRUG CONTROL

Because of its general interest to pharmacists and physicians, the following interview with Narcotics Commissioner Harry J. Anslinger is being printed. Commissioner Anslinger is the United States Representative on the United Nations Commission on Narcotic Drugs and was chairman of the Commission at its 12th session in May. The interview was conducted by the Voice of America and was made available to the press by the United States Mission to the United Nations. —Ed.

Question: How would you sum up the meeting of the United Nations Narcotics Commission which has just closed?

Answer: The meeting has been full of interest and significance. It marks further progress along the road of international cooperation in the control of narcotic drugs. This international cooperation started in 1912 with the convening of the first conference for the control of traffic in narcotics. That conference, by the way, was held in China. Cooperation is an essential element in the control of narcotic drugs whose effects are one of mankind's greatest boons but also one of his greatest curses.

The effectiveness of our own narcotics control program in the United States depends in large measure on the network of international treaties which have been negotiated and signed since 1912. The authority of the federal government to legislate in this field is to a great extent based on treaty obligations. International cooperation is probably nowhere greater and nowhere more important than in the field of narcotic drugs.

Question: Can you cite examples of countries which are cooperating actively and some which are not?

Answer: Most countries are trying hard to bring the production and trade in all narcotic drugs under control. There was a time when state smoking opium monopolies were widespread and brought in large revenues to governments. But now in practically all countries, with one outstanding exception, the governments are making real efforts to limit the production and sale of narcotics to legitimate medical needs.

The one exception is Communist China. Year after year we produce incontrovertible evidence of quantities of narcotics leaving mainland China — we seize it on ships as they dock. Yet the Communist government of China denies everything; they keep saying that the charges are only slander. The United Nations receives reports on narcotics and their control from almost all countries — members and non-members — but it has never had a report from Communist China.

I could mention a number of countries which have been making truly heroic efforts to stamp out abuse of narcotics and drug addiction, but let me single out Iran as an example. A few years ago Iran admitted to 1,500,000 opium smoking drug addicts — in itself a courageous admission.

The Iranian Government followed this with the enactment of laws to suppress opium production, to limit the use of the drug to medical purposes and to compel treatment of its addicts. The United Nations and the United States have sent technical experts to

Iran to assist that country in its gigantic task and in particular to help in the conversion of its agriculture from poppy growth to the raising of wheat and other crops. The opium smokers are being cared for in treatment centers and their rehabilitation is under way. More than 500,000 opium smokers are already started on the road back. A new day is dawning for Iran as a result of this program of narcotics control, probably the most sweeping one that is going on anywhere in the world today.

Question: There were some interesting comments made during the recent session of the Commission which showed progress in the search for substitutes for addictive drugs used medically. Could you tell us about these developments?

Answer: Yes, Dr. Nathan B. Eddy, a medical officer at the National Institute of Health of the U. S. Public Health Service and an internationally known expert in the field, reported to the Commission that long search for drugs which would relieve pain or cough without danger of addiction or of other undesirable effects had attained success at least as far as cough remedies are concerned. Overcoming these disadvantages is particularly important for chronic coughers who must have relief over a long period of time. Newly discovered properties of an old drug, noscapine, (formerly called narcotine) and demonstration of cough-relieving effects of non-addicting synthetic substances is the measure of success to which Dr. Eddy referred. Noscapine is as effective for cough relief as codeine, the long recognized standard for anti-cough remedies, and if the occasion requires, its dose can be increased without undesirable effects. Although noscapine is a natural ingredient of opium, it is chemically different from morphine and its derivatives and has been proven through long experience and specific tests to be completely non-addicting and safe for all types of patients, young and old.

Since over 25% of the medical use of narcotics in the United States is for cough remedies and prescriptions, the substitution in such use of an effective non-addictive remedy could, through decreasing the availability of more dangerous drugs, play some part in the fight against addiction.

Mr. Charles Vaille, the delegate of France to the Commission, himself an expert among experts, reported that experiments in his country confirmed the findings of the U. S. investigators on the safety of noscapine.

Question: What about the new tranquilizing drugs that are so much in the news these days? Did the United Nations Narcotics Commission consider them at all?

Answer: The Commission passed a resolution which in effect put up a warning signal that these new drugs will bear watching by governments. At the present time they are not classed as dangerous drugs or as addictive. We in the Bureau of Narcotics in Washington have so far detected no signs of addiction to their use. These tranquilizers represent a revolutionary turn in the treatment of mental disorders. They have cut down admissions to mental hospitals and markedly reduced the number of violent cases in those institutions. These drugs are doing a very great amount of good and we do not know of any narcotics addict turning to a tranquilizer instead of his regular drug. However, these drugs are — and should be — sold only by prescription and under medical supervision. Their use must be watched very carefully.

Question: Are there any other new developments you see ahead?

Answer: I am speaking now personally — and this has nothing to do with the work of the Narcotics Commission. But it has occurred to me that our experience over the years in the international control of narcotic drugs may have some usefulness in the handling of atomic energy. Through our years of trial and error we have developed a system of control which starts by limiting production in an effort to match output to legitimate use. Then trade is controlled; and for international trade export and import permits are required. Finally, there is a system of continuous inspection and enforcement. In the narcotics field we have met with considerable, though not complete, success through practical international cooperation. Some useful lessons may be drawn from our experience in the handling of man's latest problem — atomic energy — which also holds within itself vast possibilities for good but also vast potentialities for destruction.



RECENT PHARMACEUTICAL

Specialties

CATHOMYCIN SYRUP

Description: A pleasantly flavored antibiotic syrup containing 2.5% calcium novobiocin (125 mg. per 5 ml.)

Indications: For young patients or adults who may resist medication in capsule or tablet form. It is particularly indicated for pediatric use.

Cathomycin is effective in the treatment of certain infections, especially those caused by the strains of staphylococci resistant to other antibiotics.

Dosage: Recommended dosage varies according to the weight of the child.

Source: Merck, Sharp and Dohme.

ALBUMISOL

Description: Normal Serum Albumin (Human) available in two strengths — 5% concentration and a salt-poor 25% concentration.

Indications: Serum albumin, an important factor in regulating the volume of circulating blood, is indicated for any age group in the treatment of shock, burns, hemorrhage, hypoproteinemia, hepatic cirrhosis and other conditions requiring its volume-restoring property as well as its nutritive value to the tissues.

Serum albumin, which is not known to cause homologous serum hepatitis, needs no blood grouping, typing, cross-matching or reconstitution.

Albumisol, 5% concentration, supplies not only the required serum albumin but also provides all the additional fluid needed to compensate for loss of blood volume in emergency therapy and in reduction of plasma protein.

The low salt content of Albumisol, salt-

poor 25% concentration, and the small volume required to produce a favorable therapeutic effect, make it particularly useful in patients with impaired cardiovascular systems who have conditions in which serum albumin is indicated.

Source: Merck, Sharp and Dohme.

FLOROPRYL OPHTHALMIC OINTMENT

Description: An ophthalmic ointment containing 0.025% di-isopropyl fluorophosphate. Floropryl is also available as a 0.1% solution in peanut oil.

Indications: Floropryl in either solution or ointment form is used locally by installation into the conjunctival sac for the treatment of certain types of glaucoma and of strabismus (squint) and concomitant convergent strabismus (cross-eyes). For mild cases of the latter condition in small children, the use of Floropryl ointment has obviated the need for glasses in many instances.

Floropryl exerts its action by irreversibly inhibiting cholinesterase, thereby allowing acetylcholine to stimulate the smooth muscles of the iris and ciliary body.

Either the solution or the ointment may be used in glaucoma, depending upon the strength of Floropryl required. However, only the ophthalmic ointment is recommended for the treatment of strabismus. Such treatment is best determined by trial.

Source: Merck, Sharp and Dohme.

HARMONYL

Description: Harmony is the Abbott trademark for deserpidine, an alkaloid derived from the root of *Rauwolfia canescens*. Chemical studies have identified the alkaloid as 11-desmethoxyreserpine.

Indications: Harmonyyl has been found effective in the tranquilization of patients who are disturbed or overaggressive, ranging from ambulatory patients with mild anxiety tension to severely hyperactive psychotics in institutions. It has also been successfully employed in the management of mild essential hypertension, and as a supplement to more potent agents in severer cases. Where the use of reserpine has led to excessive side effects, the substitution of Harmonyyl has often been followed by reduction in some of the side effects without loss of therapeutic benefit.

Dosage: In the treatment of anxiety states and other grades of mental disturbances the dosage varies widely according to the patient's requirement. In mild cases as little as 0.1 mg. daily may be effective. In institutionalized psychiatric cases, not less than 2 to 3 mg. daily is likely to be beneficial.

In the management of mild essential hypertension, therapy may be instituted with one 0.25 mg. tablet of Harmonyyl three or four times a day. After a period of approximately ten days or sooner, depending on response, the dosage may be reduced. A maintenance dose of 0.25 mg. daily is often sufficient.

Precautions: The manufacturers literature should be consulted.

Dosage Forms: Supplied as 0.1 mg. tablets, 0.25 mg. grooved and 1 mg. grooved tablets for oral administration.

Source: Abbott Laboratories.

Description: Tablets of Ethotoin (3-ethyl-5-phenylhydantoin) a new anticonvulsant of the hydantoin series.

Indication: Primarily for control of grand mal seizures, and to a lesser extent psychomotor seizures. Of benefit in some cases of petit mal and petit mal variants.

Dosage: Average recommended adult dose is 2 to 3 gms. a day, given after food in four to six evenly spaced doses. Dosage starts with one gm. daily and then is increased gradually to optimal dosage. For children the dosage varies. The literature should be consulted.

Dosage forms: Tablets of 250 mg. and 500 mg. are supplied in bottles of 100 and 1000.

Source: Abbott Laboratories.

ORINASE

Description: Orinase is Tolbutamide (1-butyl-3-p-tolylsulfonylurea).

Indications: The clinical indication for orinase is uncomplicated diabetes mellitus of the stable type variously described as relatively mild adult, maturity-onset, or non-ketotic which cannot be adequately controlled by dietary restrictions alone. It is not oral insulin.

Dosage: The manufacturers literature should be thoroughly read and understood.

Dosage Form: Compressed scored tablets Orinase 0.5 Gm. are available in bottles of 50 tablets.

Source: Upjohn.

SUMYCIN

Description: A new phosphate complex of tetracycline. Each capsule contains the equivalent of 250 mgms. of tetracycline HCl.

Indications: For the many common infections, including those of the respiratory, gastrointestinal, and genitourinary systems which are amenable to tetracycline therapy.

The phosphate complex has the advantage of providing faster and higher initial blood levels for rapid, well tolerated and fully effective broad spectrum antibiotic therapy.

Dosage: The dosage is the same as for other forms of tetracycline.

Dosage Forms: 250 mgm. capsules in bottles of 16 and 100.

Source: E. R. Squibb.

TRIONINE

Description: Trionine provides the active principle of thyroid (triiodothyronine) in pure crystalline form.

Indications: Trionine acts in much the same manner as desiccated thyroid or thyroxin. However, Trionine is characterized by rapid onset (within 48 hours), prompt utilization by tissues and short duration of action (2 to 3 days). These advantages are possible because — unlike most thyroid preparations — Trionine acts at the cellular level without undergoing molecular structural changes. Since Trionine is a pure crystalline compound requiring no biological standardization, constant response can be expected from a given dose.

(Continued on Page 339)

PRESIDENT'S PAGE

Rx



Fellow Pharmacists:

I wish to take this opportunity to thank all the members of my profession who were present at the 71st Annual Convention of our Association at Rapid City. By giving of your time and your efforts in committee meetings and the business sessions of the convention you made it the success that it was. It is obvious that the more pharmacists that we can have present at these important meetings, the more things we can accomplish. The problems that are discussed at these meetings are those problems which affect all of us throughout the state and the more opinions that are expressed concerning those problems, the more democratic will be the solutions. With your cooperation our accomplishments in convention assembled make for a better association and the improvement of the profession of pharmacy in the future.

We can all be proud of the fine progress that pharmacy has made here in South Dakota through the leadership of the South Dakota State Pharmaceutical Association. I assure you that I will do everything in my power and ability to keep up the good work and progress that my predecessor has started and if you wish to write me at anytime please feel free to do so.

George Lehr

MERCHANDISING AND ADVERTISING THE ANIMAL HEALTH DEPARTMENT—

(Continued from Page 328)

9. Work with your local veterinarians.
 - a. If possible, show him where it is unethical and unsound financially for him to dispense rather than prescribe.
 - b. If you can gain the cooperation of the local veterinarian, use some good sensible judgment in advertising your department.
 - c. Don't diagnose but send the farmer to the veterinarian.
 - d. Refer to your department as an animal health department or animal pharmacy department in preference to veterinary department.

In summing up, we feel as an industry that it is important that the pharmacist merchandise his animal health department. It is a profitable department and will bring farm traffic other than animal health supplies to your store. If the farmers buy this merchandise, they will be back for their prescriptions and other health needs. Also, if you don't merchandise and advertise this depart-

ment, then some non-drug outlet is going to take over this business. Once this market is lost it will be hard to regain.

RECENT PHARMACEUTICAL SPECIALTIES—

(Continued from Page 337)

Hypothyroidism — with or without myxedema — and cretinism. Trionine may also be useful in the treatment of obesity, infertility, skin disorders, hypogonadism and menstrual disorders associated with thyroid deficiency.

Dosage: The usual dose Trionine is 25 to 100 micrograms a day, depending on the patient's response. Fifty micrograms of Trionine are approximately equivalent to 1½ gr. of desiccated thyroid or 100 mcg. of l-thyroxin. The usual precautions in thyroid replacement therapy should be observed.

Dosage Forms: Oral tablets, 50 mcg. (pink), 25 mcg. (yellow) and 5 mcg. (green)—bottles of 100 and 1000. Potency is expressed in terms of the active isomer or triiodothyronine.

Source: Roche.

MESSAGE
OF — THE — MONTH
... from

Druggists' Mutual INSURANCE COMPANY OF IOWA


You'll Soon Be PUTTING THE 'HEAT' ON!

- and now is the time for the Pharmacist to call in the Plumber—the only man who can "write a prescription" for an ailing heating system.
- so now, during summer's hot weather, is the time to call in your Plumber friend and have him make a quick but expert check on your store's heating system.
- if you take this simple precaution now, you will have peace-of-mind when it comes time to put the 'Heat' on in your store.



HOME OFFICES
ALGONA, IOWA

All Policies Non-Assessable



R_x PHARMACY

News

GEORGE LEHR ELECTED SDPhA PRESIDENT

A Rapid City pharmacist George Lehr was elected President of the South Dakota State Pharmaceutical Association for the year 1957-58 at the 71st Annual Convention of the Association June 22 in Rapid City. Mr. Lehr is the owner of the Lehr Drug in downtown Rapid City. Following installation of the new officers, Lehr said "I am greatly pleased that the members of this association have seen fit to elect me to be their head for the coming year. This convention has profited us all due to the splendid cooperation and hard work of the officers and members present. I hope that I will be able to serve as capably and will do everything in my power and ability to keep up the good work and progress of my predecessor."

Installed besides Lehr as officers for the coming year were Vere A. Larsen, Alcester, First Vice-President; Willis C. Hodson, Aberdeen, Second Vice-President; Albert H. Zarecky, Pierre, Third Vice-President; Phillip Case, Parker, Fourth Vice-President; and J. C. Shirley, Brookings, Treasurer.

Appointed by the Executive Committee was Bliss C. Wilson, Pierre, Secretary of the Association, and Harold S. Bailey, Brookings, Pharmaceutical Editor for the South Dakota Journal of Medicine and Pharmacy.

COOPERATIVE DENTAL-PHARMACY RESEARCH

The convention approved the establishment of a cooperative interprofessional research program at the Division of Pharmacy, South Dakota State College. The program will be financially and professionally supported

by both the South Dakota State Dental Association and the South Dakota State Pharmaceutical Association. Under the supervision of the staff of the Division of Pharmacy, the program will involve research on problems of mutual benefit to both of the health professions. The research equipment and laboratories of the Departments of Pharmaceutical Chemistry, Pharmacy, and Pharmacology will be used.

In approving the establishment of this program the two associations noted that cooperation between the pharmacists and dentists of the state of South Dakota as members of the public health team has always been of the highest professional order and that the establishment of a mutual research program would be of great value professionally and public-relations-wise to the individual members of both professions in the state.

DR. FARIS PFISTER
1902—1957



Dr. Farris Fred Pfister, son of Fred and Elsie Pfister, was born November 1, 1902, at Dell Rapids. He was educated in the public schools of Dell Rapids, and then attended the University of South Dakota for four years where he took his pre-medical training. There he became a member of the Lambda Chi Alpha Social fraternity.

Upon completion of his studies at Vermillion, he was accepted at the University of Cincinnati, Ohio, where he finished his medical course and received his M.D. degree. While there, he joined Phi Chi national medical fraternity.

He interned at St. Elizabeth Hospital at Dayton, Ohio, and at Yankton, in addition to receiving a fellowship in pediatrics at the Children's Memorial Hospital in Chicago.

He went to Webster in 1927 where he was associated with the Peabody Memorial Hospital and Clinic for 30 years.

He was married in 1929 to Jessie Nicol of Aberdeen and to this union two children were born: Faris George (Skip), now in business at Sioux City, Ia., and Muriel Ann who finished Webster high school last spring and plans to enter the University of South Dakota in Sept.

Dr. Pfister was an outstanding man in his profession. He loved people and his work was his life.

He was president-elect of the South Dakota State Medical Association and resigned last spring because of his health. He was on the council of the South Dakota State Medical Association for many years. He was appointed on the Board of Medical Examiners by Governor Sigurd Anderson and was recently re-appointed by Governor Joe Foss. He was a past president of the Whetstone Valley Medical Society.

He was chief of the Peabody Memorial Clinic and Hospital for the past 10 years. He was past president of the Webster Kiwanis Club and past governor of the Minnesota-Dakotas district of Kiwanis International.

He had served on the Webster Board of Education for the past 17 years, several years as president, and had an active part in helping bring to the city many fine improvements, including Athletic Park, Armory-Auditorium and the new addition to the city school.

Dr. Pfister was a veteran of World War II, having served for 40 months in the Medical Corps mostly on the Pacific Coast and reaching the rank of major.

He was a 32nd degree mason and a member of various Masonic bodies.

Besides his wife and two children, he leaves two sisters and a host of friends.

Scientific P A P E R

THE OBSTRUCTED TEAR DUCT

By

Sidney F. Becker, M.D.

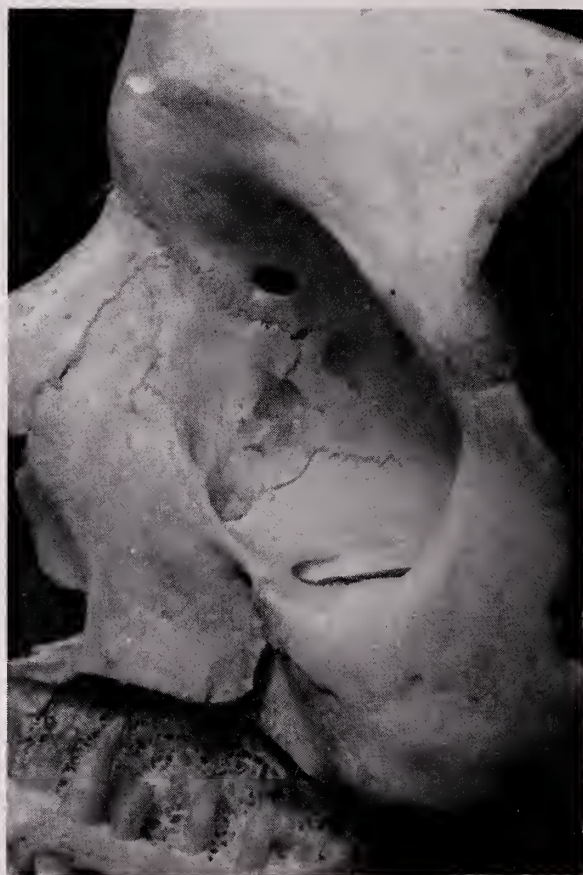
and

John B. Gregg, M.D.

Sioux Falls, South Dakota

The lacrimal system of the human eye includes two main portions: 1) the secretory mechanism, 2) the excretory apparatus. The secretory portion is composed of the lacrimal and accessory lacrimal glands which are located in the upper, outer fornix of the eyelids. Tears, which are secreted by the lacrimal glands, have two principal functions: 1) to keep the clear, transparent cornea in the proper state of deturgescence and 2) bacteriostatic properties are given to tears by the enzyme, Lysozyme. The excretory portion of the lacrimal apparatus is composed of the punctum, canaliculi, lacrimal sac and the nasal lacrimal duct. (See figures #1, 2) Tears are carried by gravitation, blinking and osmosis across the cornea into the medial lake where they pass through the lacrimal punctum and canaliculi into the lacrimal sac and finally empty into the inferior meatus of the nose through the nasal lacrimal duct. The Tensor tarsi muscle (Horner's muscle) which lies across the canaliculus and the lacrimal sac exerts a pumping action which carries tears from the lacrimal sac into the nose. Its physiology is now under investigation. Obstructions of the lacrimal excretory passages are quite common and will be discussed here.

Canalization of the lumen of the nasolacrimal ducts may be defective at birth. 1) (See figure #3) Epiphora and infection usually follow this type of obstruction soon. Acquired obstruction may be due to many factors.



1) Human skull viewed from lateral aspect showing the orbit and opening to the naso-lacrimal duct.



2) Composite picture showing schematic anatomy of tear duct system on the left and anterior view of a hemi-skull on the right with probe in the naso-lacrimal duct.



3) A six day old infant with an obstructed naso-lacrimal duct. Note the dilated tear sac.

These include: 1) faculty canalization of the naso-lacrimal duct followed by secondary infection and subsequent stenosis of the duct, 2) lid infections and chalazions in the medial portion of the lids which obstruct the canaliculus and punctum, 2) (See Figure #4, 5) 3) trauma to the lids, especially lacerations of the medial portions, 4) fractures of the nasal and facial bones with involvement of the lacrimal bone (See figures #6) and 5) allergy of the nose or conjunctiva complicated by infection and stenosis. Other causes of obstruction which are less commonly seen include redundant turbinates, nasal septal deflection, nasal polyps and chronic nasal infection or suppuration in the paranasal sinuses. 3)4) Tumors 5)6) and concretions 7) in the canaliculi occasionally cause obstruction.

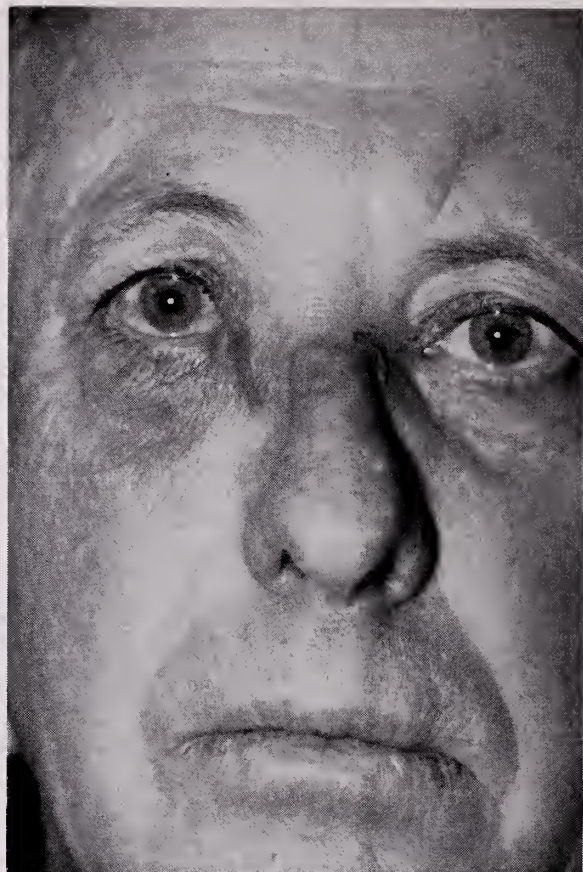
Because of the dependent position of the naso-lacrimal sac, obstruction of its inferior end commonly results in stasis followed by



4) Acute dacryocystitis secondary to stenosis of naso-lacrimal duct resulting from repeated lid infections.



5) The same patient as figure #4, following dacryocystorhinostomy.



6) Acute dacryocystitis following severe crushing injury to the face with fractures of nasal bones and injury to the medial portion of the lower eyelid.

infection of the sac (dacryocystitis). When this occurs the sac becomes distended and tense and the adnexal tissues are hyperemic and edematous exhibiting the usual signs of an acute localized abscess. Local heat, rest and appropriate anti-infection therapy will usually improve the acute phase of dacryocystitis in most instances. In some cases the dilated tear sac may have to be incised and drained or aspirated. 8) If there are repeated bouts of obstruction and infection with scarring and stenosis, permanent elimination of this condition requires re-establishment of drainage into the nose.

Many methods have been used to eliminate obstruction of the lacrimal passages. Some cases with low grade or repeated lacrimal obstruction have responded at least temporarily to probing and irrigation through the ducts. Careful, gentle massage to the dilated sac has proved helpful in eliminating the acute obstruction, especially in infants, (See figure #7) The antibiotics may be beneficial in com-

bating acute infections and the corticosteroids are useful in reducing the inflammatory reaction in an injured or infected tear duct system. However, in cases where there have been repeated episodes of obstruction, infection and scarring, or where there is a tear duct anomaly, these drugs do not eliminate the basic underlying pathology. It is in these more severe cases that some surgical approach to the obstructed tear duct is necessary. 9)10)11)

For a period of time excision of the lacrimal gland was quite popular, but due to the presence of accessory lacrimal glands, it was usually not successful in eliminating the epiphora. This procedure is no longer in vogue. Excision of the lacrimal sac has been performed and was found to be quite successful in eliminating the acute attacks of dacryocystitis. However, the persistent epiphora which followed this procedure was often very distressing to the patient. This method of therapy has also been generally discarded.

results. This method of performing a dacryocystorhinostomy utilizes general anesthesia under which a small incision is made medial to the nasal fornix of the eye, paralleling the lacrimal crest. (See figure #8) Dissection is carried down to the lacrimal crest exposing the tear sac in its fossa. A one and one half centimeter hole is made through the lacrimal bone to unroof the nasal mucosa. An incision one centimeter in length is made through the nasal mucosa (See figure #9) in the long axis



9) Photograph showing the exposed lacrimal sac and nasal mucosa. The lacrimal bone has been removed. Note probe extending from the nose into the wound through the incision in the nasal mucosa.

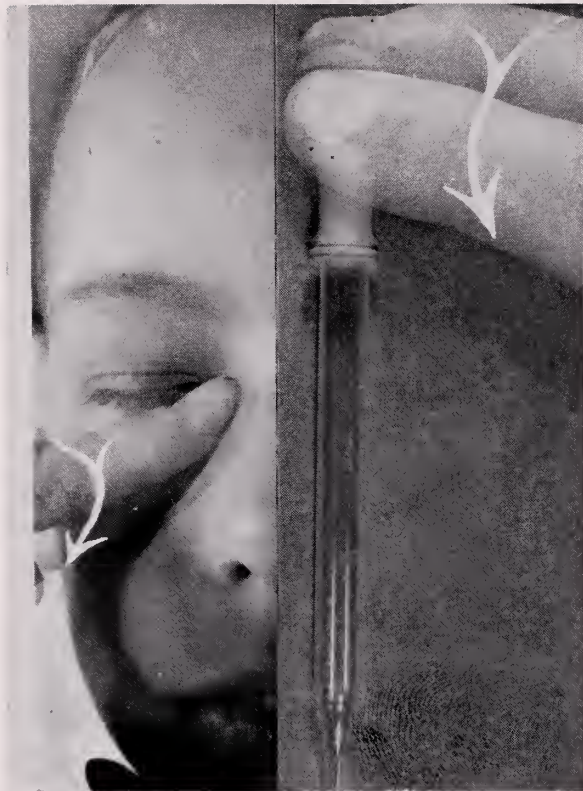
of the nose and a comparable parallel incision is made in the lacrimal sac adjacent to the nasal mucosal incision. The posterior lips of the two mucosal incisions are then approximated with two or three catgut sutures. (See figure 10) The mucosal incisions are converted to an "H" shape making definite anterior and posterior flaps. After dilatation of the punctum and probing of the canaliculus, a Viers needle with a blunt obturator is inserted into the lacrimal sac and visualized through the incision into the sac. (See figure



10) Insertion of sutures anastomosing the posterior lips of the nasal mucosa and lacrimal sac.

#11) A polyethylene tube is passed through the canula into the sac and then into the nose. The tube is brought out through the nostril and connected to the other end of the plastic tube protruding from the canaliculus. The anterior mucosal flaps are then sutured with catgut (See figure #12) and the skin is closed in layers. See figure #13) The polyethylene tubing is left in place for approximately six weeks, at which time it is removed and the duct system is tested for patency.

COMMENT: The technique of dacryocystorhinostomy described combines an external approach which allows direct visulation of the anastomosis between the nasal mucosa and the lacrimal sac, and placement of a polyethylene tube completely through the lacrimal excretory system. It has been very satisfactory in our experience and has been utilized in nine cases to a high degree of success. One case is now approximately twenty-four months post operative and completely asymptomatic. The other patients all have well functioning tear ducts. The cosmetic re-



7) Composite photograph showing the maneuver utilized to massage an obstructed tear duct. Note the analogy to a rolling pressure on the bulb of a medicine dropper.

The external and the intra-nasal approaches to the lacrimal excretory apparatus to re-establish drainage of tears into the nose have been utilized for many years. Dacryocystorhinostomy can be done in almost any age group 12) safely and successfully. About the only contra-indication is acute infection in the tear sac. Several modifications of this operation, namely the West, the Dupuy-Dutemps and the Toti-Mosher procedures, have been very successful. The basic principle underlying all of these operations is to establish a permanent fistula between the lacrimal sac and the nasal mucosa.

Recently Viers 13)16) advocated still another technique which did not use either an external or an intranasal incision. This procedure employed a trocar with a pointed obturator which was passed through the canaliculus into the lacrimal sac and then manipulated through the lacrimal bone into the nose. After removal of the obturator a small polyethylene tube was threaded through the canula and into the nose. This plastic tube

was left in place for about six weeks to encourage epithelialization of the tract so that a permanent fistula would result. A modification of this technique was also advocated for correction of obstructed canaliculi. Although theoretically this operation is much simpler and easier, the method was not too successful due to the small opening through the lacrimal bone. It has been largely discarded, even by Viers. Moulton 14) and Henderson 15) have also reported the use of polyethylene tubing with good results in the treatment of lacrimal obstructions in the puncta and canaliculi. After critical evaluation of the long term results of the various operations, it becomes apparent that an adequate opening from the lacrimal sac into the nose is the most important single feature influencing the success of any procedure designed to establish the patency of the obstructed tear duct.

During the past two years the authors have used a modification of the external operative approach to the tear sac with very satisfying



8) Pre-operative photograph showing dilated lacrimal sac caused by repeated infections.



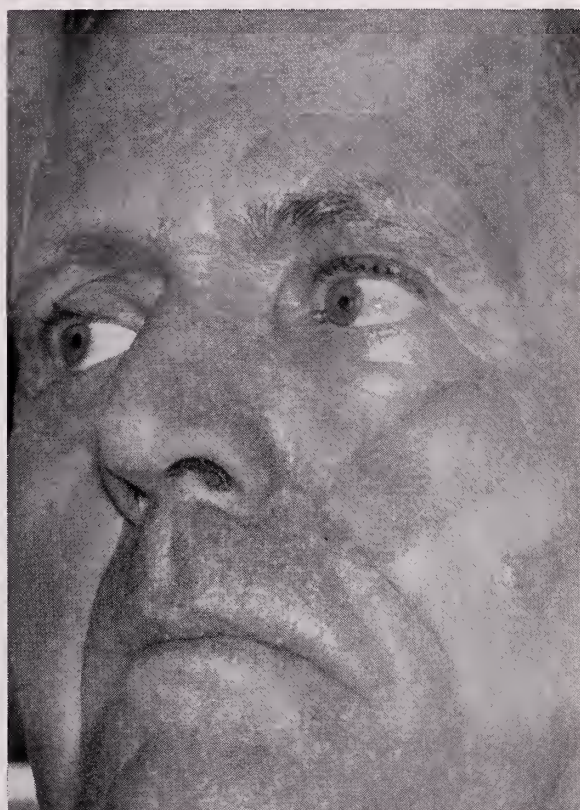
11) Probing and dilatation of the punctum and canaliculus with a Viers needle. A polyethylene tube is threaded through the canula and into the nose.



12) Closure of anterior flaps of nasal and lacrimal sac mucosa.



13) Photograph of the wound two weeks after operation. Note the polyethylene tubing in place.



14) Mild cicatricial scar formation following dacryocystorhinostomy.

sults have been excellent. The only unwanted effect seen in these cases was mild, cicatricial scar formation in the skin incision of one patient. (See figure #14) However, this patient was very pleased with the result.

The primary reason that this type of procedure has proved satisfactory is because it eliminates all constrictions in the lacrimal excretory apparatus. Operations which do not provide some means for maintaining the patency of the anastomosis may result in stenosis, regardless of the technique. In some cases with long standing chronic infection, both the naso-lacrimal duct and the distal end of the canaliculus may be obstructed. An operation which corrects only the obstruction in the lacrimal sac or the naso-lacrimal duct but omits attention to pathology in the proximal tear duct apparatus would prove unsuccessful in these instances. The procedure described here eliminates the possible source of failure which may occur following simple anastomosis between the nasal mucosa and the lacrimal sac.

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SUPPLEMENTARY ROSTER

The following are paid members who were not included in the August Roster.

Peter K. Steiner, M.D.—Sioux Falls
M. B. Lyso, M.D.—Yankton
G. C. Torkildson, M.D.—McLaughlin
H. D. Phelps, M.D.—Winner

PERIPHERAL VASCULAR DISEASE

A new film in color with sound showing the physiology and efficacy of a new therapeutic agent has been announced by the Arlington-Funk Laboratories as available for showing at meetings of District Medical Societies and Hospital Staffs. The film shows the classification of functional and organic occlusive vascular diseases and new methods of evaluating muscle blood flow. It points up the widespread occurrence of peripheral arterial, and venous, circulatory disease and how circulation is increased by a new synthetic adrenalin-like drug. It is a 16mm. film in color and with sound, and runs for 32 minutes. Arrangements for showing the film can be

made by writing to either:

Medical Film Guild, Ltd.
 506 West 57th Street
 New York 19, New York
 Arlington-Funk Laboratories
 250 East 43rd Street
 New York 17, New York

The NEW YORK BRANCH of the American Pharmaceutical Association is pleased to announce that the 1957 Remington Honor Medal will be presented to Dr. W. Paul Briggs at a dinner meeting of the Branch. The Remington Dinner will be held on Monday evening, December 2, 1957 at the Hotel Roosevelt in New York City at 7 o'clock.

Chairman Irving Rubin, Managing Editor of American Druggist may be reached at the offices of the Branch, 115 West 68 Street, New York 23.

The Officers and Executive Committee of the New York Branch will meet shortly to establish new procedures concerning the presentation of the Remington Medal.



ACUTE GOUT IN PHEASANT HUNTERS (PHEASANT HUNTER'S TOE)

Robert E. Van Demark, M.D.
Sioux Falls, S. D.

Well known over the nation for its pheasant hunting, South Dakota is host each fall to pheasant hunters from every state in this country. In 1956, 20,253 out-of-state hunters bought licenses in addition to 107,866 resident hunters, to give a total of 128,119 hunters according to the official records from the State Game, Fish and Parks Department. Next October a like number will probably be in the fields.

Less well known is the fact that pheasant meat contains a fairly large amount of purine bodies. It belongs to the second highest class of purine foods (which contain 75-150 mg. of purine bodies in 100 gm. of food). Each fall, acute gout is seen in pheasant hunters as a result of this fact.

The precipitating factors in gout are too well known to require repetition here. Sufficient to say, trauma to the feet in walking through fields and gulleys, the over-indulgence in holiday alcoholic beverages, the fatigue of excessive exercise in those unaccustomed to it, and gorging on delicious and well cooked pheasant and high caloric foods at the end of the day, all predispose to the acute onset of gout.

The following morning the hunter awakens early with an extremely painful foot. The great toe joint is swollen, tense, stiff, and has a bluish red appearance with dilated veins. Almost invariably the hunter thinks the joint was spained unknowingly, or a new or uncomfortable pair of hunting boots are

blamed. The fact that only one foot is affected adds plausibility to the idea of a sprain. The condition occurs more commonly in the middle aged or older males. Usually there is no previous history of trouble. Apparently the purine metabolism is only minimally disturbed and the gout is not precipitated under ordinary circumstances.

Constitutional symptoms are not marked as a rule. The uric acid content of the blood may be elevated but usually it is not excessive, particularly in those suffering their first attack. The height of the uricacidemia does not necessarily parallel the severity of the local inflammation.

Roentgenographic examination in the usual case shows no bone or joint abnormalities except for occasional osteoarthritic of the great toe joint; marked soft tissue swelling is present.

The actual pathogenesis of gout still remains unknown.¹ Normally 700 mg. of uric acid (formed from the metabolism of purines) are excreted daily in the urine. The factors of importance in gout are (1) the increased production of uric acid in the body particularly the increased purine-intake, (2) a decreased rate of its destruction, (3) an impaired rate of its excretion by the kidney.

Local treatment of varying degree may be

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1. Grollman, A.: Clinical Physiology. New York, McGraw-Hill, 1957.
2. Howorth, M. B.: A textbook of Orthopedics. Philadelphia, W. B. Saunders, 1952.

required, and in the extremely painful case consists of rest, elevation and hot packs. Local pain is treated by opiates and analgesics. A cradle over an extremely painful foot affords protection and comfort.

In the systemic treatment various drugs can be used. Colchicine gr. 1/100 (0.0006 gm.) is given every two hours during the day and at four hour intervals during the night, until evidence of nausea, abdominal cramps or diarrhea develop. Butazolidin has also been

very effective, but I have discontinued its use because of reported toxic reactions. Cortisone has not been as effective in my experience. Probenecid and salicylates are reported useful in increasing the uric acid output by blocking the tubular absorption of uric acid in the kidney. The average case does not require a low purine diet for the acute phase to subside, but high purine foods should be avoided. Prompt recovery is the rule. The patient is informed on the possibility of recurrences.

THE DAKOTAS, A.M.A. AND THE PUBLIC

by

Dwight H. Murray, M.D.

President-Elect

American Medical Association

The Dakotas have a remarkable medical history . . . this I learned from reading Dr. R. G. Mayer's history of Dakota medicine.

You can go all the way back to 1905 when President Thomas Jefferson sponsored the expedition of Lewis and Clark and directed them to take along medical supplies for the protection of the health of the party. Before leaving from St. Louis, Capt. Clark was given a "free hand" course in medicine and surgery, and he served as the doctor of the expedition.

It was 55 years later, in 1861, that your Territory of Dakota attained corporate existence. For your first governor President Abraham Lincoln chose Dr. William Jayne, a practicing physician of Springfield, Illinois. Your medical associations, therefore, can be proud that the Territory had a regular physician as its first governor.

And seven years before the Territory was divided and North and South Dakota became states, the Dakota Medical Society was formed . . . June 3, 1882 . . . 75 years ago in Milbank. The formation of the Dakota Society was stimulated by the fact that the American Medical Association was scheduled to hold its annual meeting in St. Paul in June of that same year.

Your Dakota Society had 10 charter members. The temporary chairman was Dr. A.

Grant of Bath, South Dakota, and the temporary secretary was Dr. W. E. Duncan of Ellendale, North Dakota. At the meeting Dr. S. B. McGlumphy of Yankton, South Dakota, was elected your first president, and he also gave the first known presentation of a paper at a medical meeting in the Dakotas.

When the Territory was divided into states in 1889, North Dakota formed its own medical association. However, together you celebrated 50 years of Dakota medicine in 1931 and now you are holding this joint medical association meeting in honor of the 75th year of Dakota medicine.

As president-elect of the American Medical Association, I wish to pay the highest tribute to Dakota medicine and to the fine contributions you have made in the last 75 years. Your roll of great names in medicine is a long one, and you presently are contributing more new names to that list.

I am proud to say that two important committees making reports to the American Medical Association in the next 12 months or so are headed by Dakota doctors.

Next week in Chicago, Dr. Willard Wright of North Dakota and his committee of the Council on Medical Service will report to the AMA House of Delegates on private practice by full-time faculty members of medical schools. Doctor Wright and his committee will set forth some fundamental principles

* Delivered before the North and South Dakota Medical Meeting, June 4, 1956 in Aberdeen, S. D.

on medical school-physician relations.

And within the next 12 months or so Dr. Leonard W. Larson of South Dakota and his 15-member Commission on Medical Care Plans will report on whether various types of medical care plans are being used to their greatest degree in promoting the availability of health services, and if these plans are being conducted as to protect the public and the proper interests of the medical profession.

The commission has a mammoth job. It is studying 250 to 300 miscellaneous medical care plans; scores of student health services by colleges and universities; 116 medical society and related plans including Blue Shield; about 500 private insurance plans, and many industrial programs that provide occupational and non-occupational medical care as well as the medical care coverage of 39 million employees under workmen's compensation.

The findings of the Larson committee undoubtedly will help to guide the A.M.A. and its members in continuing the never-ending search for improving the quality and quantity of medical care for the American people.

Because I am a general practitioner, because I started my private practice 35 years ago, and because I come from a small town in California I feel that I am quite close to your important program of doctor placement and distribution. Like many of you I began in a small community where adequate medical facilities had to be built.

In those "horse and buggy" days it was difficult to practice the best medicine as we have it today because of inadequate equipment, hospitals and nursing care. Travel was slow and sometimes a trip out into the country could consume a half day. In addition, it was often necessary to make daily calls on a pneumonia case for as long as six weeks.

Today many sicknesses can be cleared up quickly with the administration of wonder drugs, and rapid transportation allows the doctor to get to and from patients quickly and easily. Modern communication also permits the doctor to be in contact with patients whenever necessary.

Finally, more patients are coming to the doctor's office to avail themselves of modern medical equipment, and more hospitals are available to sick people everywhere in the country.

We all have heard a lot of talk about the so-called "doctor shortage," but is there really a shortage? Dr. Frank J. Dickinson, director of the Bureau of Medical Economic Research of the American Medical Association, says there is none. As he explains it, one-sixth of the land of the United States lies outside a 25-mile radius of the nearest physician, but only 0.16 per cent (1/6 of 1 per cent) of the population resides beyond this 25-mile radius.

Today the doctor's use of the newest in medical science and in modern equipment, plus wonder drugs and fast transportation and communication, steps up his output of medical care and more than offsets what may appear to be a physician shortage based on geography.

It is a fact, of course, that some communities do not have doctors, but often this is a matter of scanty population. Just as these communities do not have doctors, they also do not have lawyers, bakers, jewelers or dentists either. But as Doctor Dickinson's data shows, most people are not too far away from a doctor's office.

In the Dakotas you have done great work in attracting doctor to small communities where there is a need for medical service. You have done this by awakening the populace to the fact that their towns must be attractive to the young physician. In many cases your communities then have established good facilities where the doctor can do his best work and where patients can receive the best care and treatment. Working together I am sure you can fill any other areas that are in need of a physician.

As you well know, North and South Dakota continue to rank in the top six states for the highest expectation of life at birth. This indicates to me that the people of the Dakotas not only are healthy individuals, but also that the quality of medical care here is on the same high level as anywhere else in the United States . . . and U. S. medical care is the finest in the world.

I do believe, however, that medical care could be extended greatly, and immediately, if more patients would seek or receive the medical care which is available to them. Despite the public's great appetite for medical and health information, its willingness to take advantage of medicine's progress still lags.

I realize that it must be an old line to the public to hear us urging people to consult a doctor promptly when certain symptoms and conditions worry them. But some startling evidence has been turned up in a study conducted by the National Opinion Research Center, in cooperation with the Commission for Chronic Illness, in Hunterdon County, New Jersey. The study shows a vast amount of undiagnosed and unattended illness.

Each person interviewed was asked to report the presence of any symptoms and chronic conditions to the interviewer. Later clinical examinations were given and the results compared with reports made by the individuals.

Of the confirmed pathological conditions found in the clinical tests, only 22 per cent had been reported by the person interviewed. 61 per cent of all the heart conditions found had not been reported; 69 per cent of the diseases of the digestive system had not been reported. And so it went.

Another survey by the Health Information Foundation also shows that too many persons fail to obtain the medical care recommended by a physician or thought necessary by another member of the family. Thus, there have been two important findings: 1. A great amount of illness is never brought to the attention of doctors; and 2. treatment is not being sought for a large amount of recognized illnesses.

Years ago the lack of hospitals or of doctors may have been cited as a reason for this situation, but today it is more often the patient's own negligence, fear, or the feeling that a symptom or condition is unimportant and the doctor should not be bothered.

To our patients, I would say that all of us would like to check symptoms and conditions before they become pressing or before it is too late. Early diagnosis and early treatment certainly make it easier for both doctor and patient.

Too many people . . . in South Dakota, North Dakota and every other state . . . are not taking full advantage of the benefits of modern medicine, and cost is not the major reason.

Unfortunately, there are a few persons who still believe that government can take care of health problems better than private medicine.

The experience of business, industry and agriculture, however, has proved that government operation, subsidy or interference is of no great help. It may act as an immediate pain-killer in some instances, but it seldom cures or saves the patient.

Medical care in the nation today is in good hands because of the doctors' burning desire to serve mankind, which is a natural expression of our profession. It is in good hands because there are no governmental strings attached to medicine.

I ask you then: Why should it be the function of government to establish a system that discourages us from our traditional service to mankind?

Some critics also have charged that medicine's purpose is merely to preserve the status quo of health in the United States. Of course, we have to maintain what we already have, but medicine's aim is also to extend the bounds of life farther and farther, to help every individual improve his health, and to serve our fellow citizens every day of the year.

Your A.M.A. will continue to support federal legislation on health and medical problems and other issues that is in keeping with sound economic and social progress and is in keeping with the preservation of a free government in which the emphasis is on individual efforts and enterprise.

I want to make it clear, however, that I do not think medicine is a group apart from everyone else in this country. Our interest in legislation is somewhat specialized, of course, but we are not seeking private favors. We support or oppose legislation because of our interests in the best possible medical care for the people and because of our intense desire to see freedom survive.

We do not believe that good health can be purchased from the government or administered by it. When a third party like government is added to the private relationship of doctor and patient, there is certain to be too little medicine and too much meddling.

The free enterprise method of medical care and service has helped to give the American people better health and longer life. I do not see why it should be taken over by any kind of government system of medicine.

We have fought for medicine's freedom before; we are ready and determined to do so

(Continued on Page 364)

The History of the South Dakota State Medical Association

THE HISTORY OF SOUTH DAKOTA STATE MEDICAL ASSOCIATION

Clark J. Pahlas

Pierre, South Dakota

(Continued from July)

PREPAYMENT PROGRAMS

Some of the characteristics of the Farm Security Administration, Farmers Aid Corporation, and the Pierre Medical Aid Association were transmitted into a later development, that of prepayment insurance. The State Medical Association was of the opinion that the public wanted some type of prepayment plan covering medical and hospital care. It further believed that if the profession did not soon offer an acceptable plan, the people would seek satisfaction in "political medicine."⁴⁶ It was this belief that led the association to have formed in 1947, the South Dakota Injury-Illness Expense Plan. This was to be a prepayment surgical-medical, nursing and hospital indemnity plan. It was to be underwritten by private insurance carriers. Its joint governing body was to include the Prepayment Committee of the South Dakota State Medical Association and the insurance carriers.⁴⁷

By April 30, 1948, a total of 4,353 individuals were insured under the South Dakota plan. At that date its insured parties were receiving 81.61% of their premiums returned to them in cash claims. A premium study of forty-nine prepayment plans showed an average of only 77.9% premium return. Compared with this figure, the South Dakota plan returned more of the premium dollar to the insured than the average prepayment plan.⁴⁸

The prepayment insurance program marked one more step in the association's attempt to bring the best possible medical care to the people of South Dakota. In this attempt the association was guided by its desires to gain state-wide professionalism and maintain its doctrine of laissez faire with respect to governmental regulation. Its accomplishments and contributions in the matter of medical legislation were two-fold: guarding the public and the profession from the quacks and cults from within and from the evils of socialized medicine from without.

CHAPTER IV CONCLUSIONS

In June, 1956, the state medical associations of North and South Dakota met in joint session at Aberdeen. Gathering together in this way during the year of their "diamond jubilee" occasioned memories of those seventy-five years of organized medicine in the two Dakotas. Joining hands with their professional brothers from the north, the members of the South Dakota State Medical Association paid tribute to that succession of illustrious men who came before them.

In reviewing this procession of dedicated physicians, it is obvious that changes have occurred in the State Medical Association and in the practice of medicine during those seventy-five years. No longer the weak, un-

46. *Journal Lancet*, LXVI (August, 1946), 258.

47. *Voluntary Prepayment Medical Benefit Plans*, Printed by the Council on Medical Service of the American Medical Association, Chicago, 1954, p. 85.

48. *Transactions of the South Dakota State Medical Association, 67th Annual Session*, June, 1948, p. 325. For additional information concerning the financial aspect of the South Dakota plan see the *South Dakota Journal of Medicine and Pharmacy*. II (August, 1949), 259.

recognized organization it was in 1882, the association stands in mid-century as one of the most respected or professional groups in the state. This growth of strength and prestige was brought about by a national vitalization of the medical profession. This crusade to professionalize the practice of medicine was led by the American Medical Association and the various state medical societies.

In South Dakota the State Medical Association has played no little part in bringing about this improved professionalism. Leading the way, the association fought for higher educational standards in the University Medical School, improved medical services, and legislation outlawing quackery.

The association since its founding has been interested in improving the medical service made available to the people of the state. To enable its members to do this, the association established committees to investigate and report on medical conditions and on new techniques being used throughout the state and the country. These committees have varied through the years, but all have aimed at the goal of improving the physician professionally. Some of these committees, such as Child Welfare, Nursing Training, Medical School Affairs, Hospitals, Blood Banks, and Care of the Indigent, have dealt specifically with the physical aspects of medical care improvements. However, other committees, such as Cancer, Heart Disease, Tuberculosis, Mental Health, and Diabetes, have dealt with the advancement of medical knowledge. By continually improving its medical services, the profession became more worthy of the trust and respect of the people.

However, the association's greatest contribution in improving the professional standards of medicine in South Dakota came in the field of legislation. It was the State Medical Association that led the way in the struggle to rid the state of quackery by establishing firm laws. This struggle with the nonprofessional elements has continued into the mid 1950's, and, in spite of the Basic Science Law passed in 1939, unlicensed clinics still exist to plague the people of South Dakota. The writer has seen at first hand the dangerous techniques used by these so-called healers, reflexologists, and the like. Such practices exist in Sioux Falls, Parker, Irene, Parkston, Marion Junction, and other places in the

state. The State Medical Association through its periodicals has waged war against these harmful elements. It has attempted to convince society of the dangers of quackery and to demonstrate the desirability of patronizing only the licensed physician.

If the State Medical Association is ever successful in its fight against the cults, it will be with the aid and support of an enlightened general public. This enlightenment can come only when the public is aware of two things: first, that the licensed practitioner is the only person professionally capable to care for them in the time of sickness; second, that as taxpayers they have the right and obligation to demand of their state government protection from the evils of quackery.

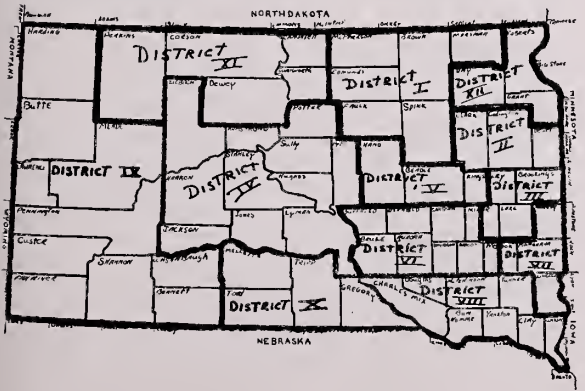
APPENDIX E**
PAST PRESIDENTS OF THE WOMEN'S
AUXILIARY TO THE SOUTH DAKOTA STATE
MEDICAL ASSOCIATION

Name	Year of Service
*Mrs. R. D. Jennings Hot Springs	1901-11
Mrs. H. M. Finnerud Watertown	1911-12
*Mrs. S. M. Hohf Yankton	1912-13
*Mrs. H. T. Kenney Pierre	1913-14
Mrs. Mary Koobs Scotland	1914-15
Mrs. T. J. Billion, Sr. Sioux Falls	1915-16
Mrs. C. S. O'Toole Vienna	1916-17
Mrs. C. V. Templeton Woonsocket	1917-18
Mrs. E. E. Gage Sioux Falls	1918-19
Mrs. J. B. Vaughn Castlewood	1919-20
Mrs. L. G. Hill Sioux Falls	1920-21
Mrs. Owen King Aberdeen	1921-22
Mrs. L. N. Grosvenor Huron	1922-23
*Mrs. A. E. Johnson Watertown	1923-24
Mrs. C. S. Bobb Mitchell	1924-25
Mrs. N. J. Nessa Sioux Falls	1925-26
Mrs. R. L. Murdy Aberdeen	1926-27
Mrs. A. E. Bostrom De Smet	1927-28
*Mrs. P. D. Peabody, Sr. Webster	1928-29
*Mrs. P. D. Peabody, Sr. Webster	1929-30
Mrs. T. J. Billion, Sr. Sioux Falls	1930-31
Mrs. T. J. Billion, Sr. Sioux Falls	1931-32
Mrs. N. K. Hopkins Arlington	1932-33
Mrs. J. C. Ohlmacher Vermillion	1933-34

Mrs. H. B. Martin Harrold	1934-35
Mrs. G. E. Burman Carthage	1935-36
Mrs. N. J. Nessa Sioux Falls	1936-37
*Mrs. J. R. Westaby Madison	1937-38
Mrs. B. A. Dyar De Smet	1938-39
*Mrs. A. E. Johnson Watertown	1939-40
Mrs. R. A. Buchanan Huron	1940-41
Mrs. F. C. Wilsson Sioux Falls	1941-42
Mrs. J. C. Hagin Miller	1942-43
Mrs. J. C. Hagin Miller	1943-44
Mrs. D. S. Baughman Madison	1944-45
Mrs. G. S. Adams Yankton	1945-46
Mrs. William Duncan Webster	1946-47
Mrs. H. Russell Brown Watertown	1947-48
Mrs. C. E. Sherwood Madison	1948-49
Mrs. W. F. Sercl Sioux Falls	1949-50
Mrs. A. P. Reding Marion	1950-51
Mrs. Howard Wold Madison	1951-52
Mrs. Verlynn V. Volin Sioux Falls	1952-53
Mrs. C. Rodney Stoltz Watertown	1953-54
Mrs. Paul Koren Rapid City	1954-55
Mrs. Faris Pfister Webster	1955-56

*Deceased
**Taken from the Handbook for Officers of the Women's Auxiliary to the South Dakota State Medical Association, typewritten copy in the possession of Mrs. Farris Pfister, Webster, South Dakota.

APPENDIX F*
DISTRICT ORGANIZATION OF THE SOUTH DAKOTA STATE MEDICAL ASSOCIATION

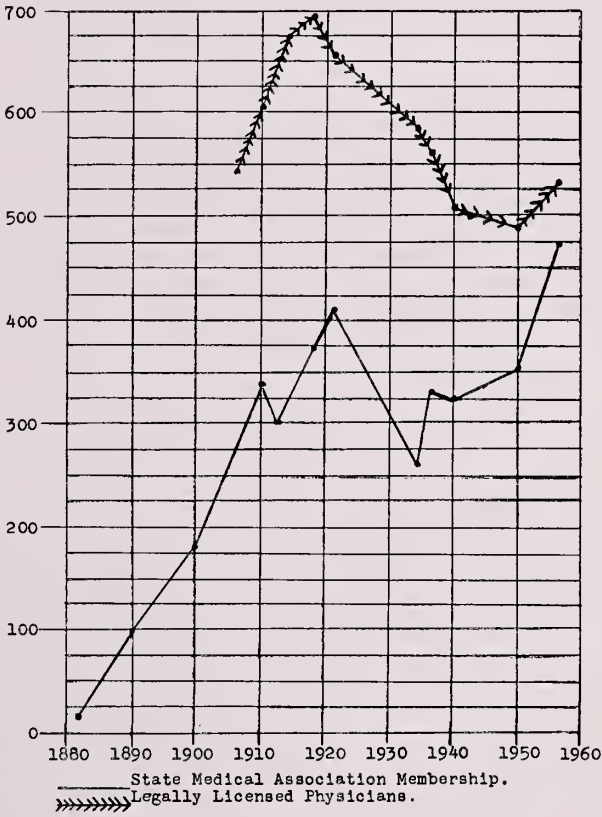


- District No. 1. Aberdeen District
- District No. 2. Watertown District
- District No. 3. Madison and Brooking District
- District No. 4. Pierre District
- District No. 5. Huron District
- District No. 6. Mitchell District
- District No. 7. Sioux Falls District
- District No. 8. Yankton District
- District No. 9. Black Hills District
- District No. 10. Rosebud District
- District No. 11. Northwest District
- District No. 12. Whetstone Valley District

*This may is copied from the Handbook for Officers of the Women's Auxiliary to the South Dakota State Medical Association.

APPENDIX H*

SOUTH DAKOTA PHYSICIANS, 1882-1956



*Figures are based on the Dakota Medical Society Records, 1882-1904 for the period to 1906. From 1906 to 1956, see the editions of the American Medical Directory, American Medical Association Press, Chicago.

APPENDIX I

ANNUAL SESSIONS, DATES, SITES AND
INCOMING OFFICERS

Year Month and Days	City	President	Secretary
1882 June 3,	Milbank	S. B. McGlumphy	H. G. Rose
1883 May 16,	Sioux Falls	J. B. VanVelsor	W. E. Crane
*1884 May 24,	Mitchell	J. B. VanVelsor	W. E. Crane
1885 May 27,	Aberdeen	G. W. Moody	H. E. McNutt
1886 May 20,	Yankton	J. C. Morgan	H. E. McNutt
1887 June 16,	Huron	F. Etter	H. E. McNutt
1888 June 21,	Redfield	F. Andros	H. E. McNutt
1889 June 20,	Mitchell	F. B. Bullard	R. C. Warne
1890 June 12,	Sioux Falls	J. W. Freeman	R. C. Warne
1891 June 10,	Chamberlain	M. Ware	R. C. Warne
1892 June 8,	Salem	A. L. Peterman	R. C. Warne
**1893 June 10,	Huron	A. L. Peterman	R. C. Warne
***1894 June 20,	Huron	R. T. Dott	W. J. Maytum
1895 June 12,	Parker	G. E. Martin	W. J. Maytum
1896 June 10, 11,	Yankton	Wm. Edwards	W. J. Maytum
1897 June 9,	Mitchell	W. E. Moore	F. H. Files
1898 June 15,	Sioux Falls	F. A. Spafford	W. J. Maytum
1899 June 15,	Yankton	D. W. Rudes	W. J. Maytum
1900 June 14,	Aberdeen	C. C. Gross	J. L. Stewart
1901 June 10, 11,	Huron	C. M. Keeling	D. W. Rudgers
1902 June 4, 5,	Scotland	J. O. Duguid	J. L. Stewart
1903 May 27,	Mitchell	B. A. Bobb	Wm. Edwards
1904 June 1,	Redfield	C. B. Mallery	Wm. Edwards
1905 July 5, 6, 7,	Deadwood	A. H. Bowman	Wm. Edwards
1906 May 22, 23, 24,	Watertown	E. T. Ramsey	R. D. Alway
1907 May 28, 29, 30,	Sioux Falls	L. C. Mead	R. D. Alway
1908 September 2, 3, 4,	Yankton	S. A. Brown	R. D. Alway
1909 September 29, 30, October 1,	Aberdeen	T. B. Smiley	R. D. Alway
1910 September 27, 28, 29	Hot Springs	H. M. Finnernd	R. D. Alway
1911 June 14,	Pierre	W. G. Smith	R. D. Alway
1912 May 22,	Mitchell	C. E. McCauley	R. D. Alway
1913 May 27,	Vermillion	F. A. Spafford	R. D. Alway
1914 May 26,	Watertown	F. Treon	R. D. Alway
1915 May 18, 19, 20,	Sioux Falls	J. B. Vaughn	R. D. Alway
1916 May 23, 24, 25,	Aberdeen	F. M. Crain	R. D. Alway
1917 May 28, 29, 30,	Yankton	A. G. Koobs	R. D. Alway
1918 May 21,	Mitchell	D. L. Scanlon	R. D. Alway
1919 May 20,	Watertown	R. D. Alway	F. A. Spafford
1920 May 18, 19, 20,	Sioux Falls	H. T. Kenney	F. A. Spafford
1921 May 24, 25, 26,	Aberdeen	G. S. Adams	F. A. Spafford
1922 May 16, 17, 18,	Huron	G. G. Cottam	R. D. Alway

* Meeting called off for lack of quorum.

** Meeting postponed until 1894.

*** Secretary's duties were combined at this time with the Treasurer, making his correct title, Secretary Treasurer.

Year Month and Days	City	President	Secretary
1923 May 22,	Watertown	F. E. Clough	R. D. Alway
1924 May 20, 21,	Mitchell	R. L. Murdy	R. D. Alway
1925 May 20,	Sioux Falls	W. R. Ball	J. F. D. Cook
1926 May 19,	Aberdeen	T. F. Riggs	J. F. D. Cook
1927 May 3, 4, 5,	Huron	S. M. Hohf	J. F. D. Cook
1928 June 7, 8, 9,	Hot Springs	N. K. Hopkins	J. F. D. Cook
1929 May 7, 8, 9,	Mitchell	L. N. Grosvenor	J. F. D. Cook
1930 May 21, 22, 23,	Sioux Falls	P. D. Peabody	J. F. D. Cook
*1931 June 1, 2, 3, 4,	Aberdeen	W. R. Bates	J. F. D. Cook
1932 June 20, 22,	Watertown	J. R. Westaby	J. F. D. Cook
1933 May 15, 16, 17,	Huron	E. W. Jones	J. F. D. Cook
1934 May 14, 15, 16,	Mitchell	W. G. Magee	J. F. D. Cook
1935 May 13, 14, 15,	Pierre	A. S. Rider	J. F. D. Cook
1936 May 4, 5, 6,	Sioux Falls	J. L. Stewart	J. F. D. Cook
1937 May 24, 25, 26,	Rapid City	E. A. Pittenger	C. E. Sherwood
1938 May, 9, 10, 11,	Huron	J. F. D. Cook	C. E. Sherwood
1939 April 24, 25, 26,	Aberdeen	J. C. Shirly	C. E. Sherwood
1940 May 20, 21, 22,	Watertown	O. G. Mabee	C. E. Sherwood
1941 May 18, 19, 20,	Mitchell	B. M. Hart	C. E. Sherwood
1942 May 13, 14, 15,	Sioux Falls	N. J. Nessa	C. E. Sherwood
1943 May 27, 28,	Huron	J. C. Ohlmacher	R. G. Mayer
1944 May 21, 22, 23,	Huron	D. S. Baughman	R. G. Mayer
1945 June 9, 10,	Watertown	Wm. Duncan	R. G. Mayer
1946 June 1, 2, 3, 4,	Aberdeen	F. S. Howe	R. G. Mayer
1947 June 1, 2, 3,	Rapid City	H. R. Brown	R. G. Mayer
1948 May 30, June 1,	Sioux Falls	J. L. Calene	R. G. Mayer
1949 May 21, 22, 23, 24,	Yankton	W. H. Saxton	R. G. Mayer
1950 May 21, 22, 23,	Huron	C. E. Robbins	R. G. Mayer
1951 June 2, 3, 4, 5, 6,	Huron	D. A. Gregory	L. J. Pankow
1952 May 17, 18, 19, 20,	Sioux Falls	R. G. Jernstrom	G. I. W. Cottam
1953 June 14, 15, 16,	Sioux Falls	R. G. Mayer	G. I. W. Cottam
1954 May 16, 17, 18,	Huron	A. W. Spiry	G. I. W. Cottam
1955 May 21, 22, 23, 24,	Mitchell	F. D. Gillis, Sr.	A. P. Reding
*1956 June 3, 4, 5, 6,	Aberdeen	A. P. Peeke	A. P. Reding

*Jointly held with the North Dakota State Medical Association in celebration of fifty and seventy-five years of organized medicine in the two Dakotas.

P R E S I D E N T ' S P A G E



Shortly after this copy of the Journal reaches you, the Council of the Association will meet in Huron to discuss business of the Association.

To those of you who aren't too familiar with the workings of your board of directors, attendance at a Council meeting would be a revelation. Mountains of work are attacked and disposed of in a short time — yet debatable subjects are given judicious consideration.

The Councilors, although elected for three years at a time do not enjoy royal perpetuity.

No one who was on the Council in 1946 is on it today — and for several years, Dr. R. J. Quinn of Burke was the only person remaining from that 1946 group. Average age of the Councilors tends to indicate youthful interest in Association activities.

May I suggest that you get to know your Councilor, bring him your ideas and criticisms, so we can build an Association to better serve you.



BLOOD BANK COMMITTEE

At the Annual Meeting in May, the House of Delegates accepted a report of the committee on Blood Banks which would, (1) establish workshops in Blood Banking procedures, (2) establish voluntary approval programs for blood banks and blood transfusion programs, (3) establish a donor club of South Dakota physicians, and (4) appropriate \$3,000.00 for a two year period to finance items 1, 2, and 3.

After acceptance of the recommendations, the council determined that appropriation for such a program was not consistent with current budget requirements so they appointed a Committee of the Council to study the proposal and to make new or amended recommendations.

The Committee recommendations have now been submitted to the council and include (1) a workshop be established at the University Medical School this Fall with stress on donor requirement, blood processing and cross matching techniques, (2) an educational program geared to encourage hospitals and physicians to see that their technicians participate in the workshop, (3) deferral of a voluntary approval program, (4) a suggestion that the Association President attempt to give impetus to a physician donors club in his visits to the District Societies, and (5) study of the financial needs of the recommended workshop.

The Committee commented further that: everyone, including the public, recognizes today the essential features of graduate and post-graduate medical education in all its phases as concerns not only the physicians but also the technicians who plays such an

intricate part in each physicians diagnosis and therapy. The ever expanding knowledge and the many skills required to perform different phases of modern medical care have made it impossible for any single individual to master the entire field or to keep abreast of the developments, except in narrow fields. It is obvious that in the public as well as the professional interest, graduate and post-graduate continuation education is as essential a part of the whole spectrum of medical education as is the undergraduate and college preparation. Post graduate education is partly accomplished through the voluntary efforts of individuals, be they donors or technicians, and partly accomplished by the requirements of professional organizations, by speciality boards, by hospitals, and by other methods of stimulating a desire to maintain professional competence.

It would seem to be a joint responsibility of the Medical Association and of the hospitals to make available to their technicians and secondarily to their physicians the ever changing modern concepts of adequacy in laboratory procedures. Certainly the State Association recognizes the advisability of aiding to the extent of its ability post-graduate education for physicians. In so doing it would seem to the Reviewing Committee that the State Association likewise acknowledges responsibility in aiding post-graduate education of those who are influential in the realm of the daily tasks of the physician. We would believe that the post-graduate education above discussed is merely the first step and believe that in years to come additional programs should and can be instituted to cover all phases of medical technology.

"ASIAN FLU"

Medical journals, newspapers and magazines, radio and TV have all been publicizing "Asian Flu" during the past month or two. An article on "Influenza" by Surgeon-general Leroy E. Burney, U. S. Public Health Service, will be published shortly in the Journal of the A.M.A. Wyeth Laboratories are distributing 150,000 copies of a booklet "Influenza 1957" to the medical profession. This booklet has been compiled for the purpose of informing the physicians throughout our country about what is at present known regarding the diagnosis, testing, prevention and treatment of the disease.

A letter from Dr. G. J. Van Heuvelen, State Health Officer, in answer to an inquiry regarding laboratory services available at our State Health Laboratory gives us the following information. "The State Health Laboratory offers service in identification by either the use of throat washings or paired blood specimens. Since the virus dies out very rapidly, throat washings should immediately be frozen and shipped in a frozen state using dry ice as a refrigerant. Because of this transportation problem it is more feasible to use the paired blood specimen test.

For the Serological test a specimen should be drawn as soon as possible after the onset of symptoms and a second specimen should be taken from 10 days to 2 weeks later. A rise in specific antibody titer is diagnostic. Since a minimum of 10 cc's of blood is required, two tubes of blood should be submitted in each instance. The regular blood tubes supplied by the laboratory may be used for this purpose. Since neither of the above laboratory tests can be completed while the patient is still ill their primary value will be to confirm the presence or absence of influenza in a community."

Older physicians in South Dakota who remember the disastrous "Flu Epidemic" of 1918 and 1919 hope that the predicted epi-

demic of Asian Flu will not be so severe, and that vaccines and the newer drugs will be more successful in the prevention and treatment of the disease.

THE MONTH IN WASHINGTON

The economy drive to the contrary notwithstanding, health spending by the Department of Health, Education, and Welfare for the fiscal year that began this July already is assured of surpassing last year's record by some \$33 million. This assumes, of course, that no further requests will be made by HEW for supplemental funds, a practice common in government for many years.

Research programs were the most favored by legislators, many of whom spoke out against federal spending by other agencies. But when the health budget came up for debate, the economy oratory subsided.

In only one instance was a health program cut back. And to the surprise of many, it occurred in the Senate which traditionally restores budget cuts originating in the House. A sum of \$45 million was voted, instead of the House-approved \$50 million, for grants to states for sewage treatment works construction. But then the Senate wrote in language permitting states to get their maximum allotments a full year after the fiscal year ends.

The Hill-Burton hospital construction program received \$3.8 million less than last year but only because the administration asked for \$121.2 million instead of the \$125 million appropriated last year.

The National Cancer Institute received the largest dollar increase of any health item in the budget. The increment was \$8 million over last year. The administration had asked

for \$48.4 million, the House voted \$46.9 million, and the Senate raised this to \$58.5. It was finally compromised at \$56.4 million.

Congress obviously agreed with the views expressed by the Senate Appropriations Committee: "... the committee is fully aware that it is providing funds for cancer research, the outcome of which is unknown. On the judgment of those who are scientifically most competent, the committee is fully willing to risk the investment on the ground that the chance of a big payoff is a reasonable one. Such risks are inherent in research."

The Institute of Arthritis and Metabolic Diseases fared well, too, getting a total of \$20,385,000 compared with last year's \$17,885,000. And the Senate Committee charged the institute with taking leadership in research on effects of radiation on the human organism.

The Mental Health Institute's spending has been going steadily upward, and this year it was given another boost with a final appropriation of \$39,217,000, an increase of about \$4 million. Other research totals for the current year: National Heart Institute, \$35,936,000; Neurology and Blindness Institute, \$21,387,000; Allergy and Infectious Disease Institute, \$17,400,000.

On only one score did the research advocates lose out. The House view prevailed in conference on the setting of a 15% ceiling on additional overhead costs allowed schools and other institutions getting federal grants. This question which drew considerable attention in hearings is likely to be reopened. Congress wants a General Accounting Office study by the end of this year.

In voting a \$5 million increase (to \$22,592,000) for general public health assistance to the states, Congress was reaffirming its support of helping local health departments increase their professional staffs and broaden their services. The Senate Committee report contained this significant language:

"... with a population increase of more than 20 million during the past decade, there are no more organized health departments than there were 10 years ago. This means that 18 million people are living in areas with no full-time organized community health services, and millions more live in areas where such services are only fragmentary."

A few days later, the Public Health Ser-

vice announced plans for a broad survey of rural health needs, particularly in sparsely settled areas. It picked for its first study Kit Carson County, Colo., an area known for its scattered farm population, low income level and adverse climatic conditions.

CAPITAL NOTES:

The President has signed into law a two-year revision of the doctor draft law permitting selective call-up of physicians to age 35 if they were deferred from regular draft service to complete professional training... The poliomyelitis vaccine act expired July 1 with all but \$400,000 of \$53.6 million taken up by states for inoculation programs. An estimated 29 million children and pregnant women received 70 million injections... The Public Health Service has conferred with the American Medical Association on medical manpower plans in event of an epidemic of the new Far East influenza... The National Library of Medicine no longer is lending books and other material over the counter to individuals; requests must be channeled through other libraries... The administration bill on federal workers health insurance has been introduced; it combines both basic and major medical coverage.

CYCLOPLEGIA AND THE OPTOMETRIST*

A Question of Malpractice for the M.D.

Howard F. Hill, M.D.

Richard N. Dennis, M.D.

It has been brought to our attention that occasionally practicing physicians have been asked to administer cycloplegic medicine for optometrists so that the optometrist may then refract (fit glasses) to children and complicated refraction cases. It is also noted that certain M.D.'s do not know that optometrists are not medically trained and not legally allowed to use or prescribe medicine in any form. They are not doctors of medicine and only use the title of doctor because of state legislative action.

Although this has happened in only a few isolated instances, the dangers involved are considerable.

(Continued on Page 364)

*An editorial published in the Maine Medical Journal, February 1957.

MEDICAL LIBRARY BOOKSHELF



In a recent letter from Patricia Saunders, assistant editor of this journal, the University Medical Library was offered the complimentary copies of publications received at the journal office. We consider these gifts as worthwhile additions to our medical library collection and will review some of them in this column.

A number of these gift books were from Ciba Foundation Symposium. The Ciba Foundation (London), an educational and scientific charity with a distinguished board of trustees receiving financial support from a world-wide chemical and pharmaceutical firm with headquarters in Basle, Switzerland, was opened by Sir Henry Dale in 1949. The Ciba Foundation forms an international clinic where workers active in medical and chemical research are encouraged to meet informally to exchange ideas and information. In the first 7 years 40 international symposia were held, attended by outstanding workers from many countries. The proceedings of these are published in full in book form, and contain much valuable and up to date information. The following are comments about several of these reports of symposia.

Regulation and Mode of Action of Thyroid Hormones. Colloquia on Endocrinology. v. 10, 1957.

This is the report of the first of the Ciba Foundation meetings devoted exclusively to the thyroid gland. According to the chairman, Dr. Rosalind Pitt-Rivers of the National Institute for Medical Research (London) the use of the radio-active isotope of iodine¹³¹ I has allowed the study of dynamic aspects of iodine metabolism in man and animals in

health and disease and the investigation of alterations in thyroid function as influenced by other endocrine organs. The part played by the hypothalamus in control of the thyroid by the anterior pituitary has received special attention and the relationships of the adrenals and the pancreas to certain aspects of thyroid function is now beginning to be investigated.

In the biochemical field chromatography of ¹³¹I-labelled thyroid products has made possible the detection and separation of iodinated compounds present in small amounts of biological material and has led to the discovery of iodinated thyronines. To date the exact nature of these thyroid hormones is unknown. It is now thought that one of the thyroids actions is to control the liberation of energy released during biological oxidation. To quote "It does indeed seem reasonable that hormones which contribute so much to the control of energy of the whole animal should have as their target some part of the control mechanisms of coupled high energy phosphate reactions . . . future work may show that the overall thyroid hormone effect is only manifested in a physiological system which includes other endocrine glands since these exert so great an influence on thyroid function in vivo."

Titles of some of the papers presented were, "Hypothalamus-pituitary-thyroid relationships"; "Effects of hypophysectomy on organic iodine formation in rat thyroids"; "Factors influencing the thyroidal iodide pump" (By Dr. Halmi, Dept. of Anatomy, Iowa University).

The informative and challenging part of the colloquium was the lively discussion tak-

ing place after the presentation of the papers, and it is through reading the remarks of the many authorities present that the latest theories and results of experiments and personal observations can be learned.

Experimental Tuberculosis; Bacillus and Host. Ciba Foundation Symposium, 1955.

The chairman, Dr. Arnold Rich of the Dept. of Pathology of Johns Hopkins University expressed the purpose of the symposium as a concentration upon basic inquiries into the constitution and properties of the tubercle bacillus, which endow it with the capacity to act upon the body as it does, and to deliberate upon the reactions of the body to those pathogenetic qualities — and this without any immediate preoccupation with matters of morbidity or mortality statistics or therapeutic results. Available information indicates that in most countries the number of new, active

cases continues at a high level, even though the improved means of treatment save the lives of more than was formerly possible. Tuberculosis still kills more persons than any other single cause of death in the period of life between 15 and 35 and the tubercle bacillus is still a powerful enemy whose inadequately understood constitution and properties demand continuous intensive study. Titles such as "Chemical structure and biological activity of mycolic acids"; "The role of bacterial multiplication in the establishment of immunity to tuberculosis"; "The mechanisms involved in acquired immunity to tuberculosis" with the general discussion afterwards make it possible to acquire basic information regarding the pathogenesis of this still to be reckoned with enemy.

Mrs. Esther Howard
Medical Librarian

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Air Research and Development Command, U.S.A.F.
Holloman Air Force Base, New Mexico

and —
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ALVAN L. BARACH, M.D., Clinical Professor of Medicine, College of Physicians and Surgeons, Columbia University.
CLYDE G. CULBERTSON, M.D., Director, Biological Research Division The Lilly Research Laboratories of Clinical Pathology, Indiana University School of Medicine
JAMES G. HUGHES, M.D., Professor of Pediatrics, University of Tennessee College of Medicine
VICTOR F. MARSHALL, M.D., Attending Surgeon-in-charge, Urology, James Buchanan Brady Foundation of the New York Hospital, and Associate Professor of Clinical Surgery (Urology) Cornell University Medical College
JOHN H. MOE, M.D., Clinical Professor and Director Division of Orthopedic Surgery, University of Minnesota Medical School
CARL A. MOYER, M.D., Bixby Professor of Surgery and Head of the Department, Washington University School of Medicine
G. O'NEIL PROUD, M.D., Professor and Chairman of the Department of Otorhinolaryngology, University of Kansas School of Medicine
HYRUM R. REICHMAN, M.D., Assistant Clinical Professor of Surgery, University of Utah College of Medicine
HERBERT E. SCHMITZ, M.D., Professor and Chairman of the Department of Obstetrics and Gynecology, Stritch School of Medicine of Loyola University, Director Mercy Hospital Institute of Radiation Therapy
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THE DAKOTAS, AMA AND THE PUBLIC—

(Continued from Page 352)

again if the need arises. Remember . . . no country has ever been socialized until the medical profession has been socialized. Therefore, we oppose government in medicine not only to protect freedom in our profession but also to protect all Americans from a form of government that lessens individual liberties.

Keeping our democracy in a healthful political state is a never-ending task. It is not enough that our profession, or any other group of Americans, rises up only when there is a direct threat to democracy. The job requires the interest of all citizens at all times. And certainly the physician must contribute his share; he must donate substantial time to the job even though he is extremely busy. He cannot afford to pass off public affairs as "someone else's business." If we desire to work in freedom, we must not fail to work for the form of government that makes it possible.

This year all of us can make a direct, personal contribution to democracy, for 1956 is a general election year. We have great responsibility of electing a president, vice-president, a third of our U. S. senators and all of our U. S. representatives. On top of this there are state and local officers to choose.

Therefore, I call upon each one of you to exercise your right of franchise. As a nation our record for participating in elections is far below what it should be. This record must not get worse; instead it must improve so that we all can keep our freedom. So VOTE, regardless of how you vote.

Of course, there is more to voting than just going to the polls. Each of us must know the candidates and their views. The records and the "promises" of the candidates must be evaluated so that we may help to choose top quality legislators. Now is the time to make our views known to the candidates. We cannot sit on our pedestals and wait for them to come to us, for they are not going to be concerned about the problems of the medical profession unless we ourselves are concerned.

The men we elect to Congress this year will be the men who introduce legislation in the first session of the 85th Congress. These men should hear our story; they should hear it from us now.

In conclusion, let me congratulate you

again on behalf of the American Medical Association, the House of Delegates, the Board of Trustees, Doctor Hess and myself for 75 wonderful years of Dakota medicine. We salute you.

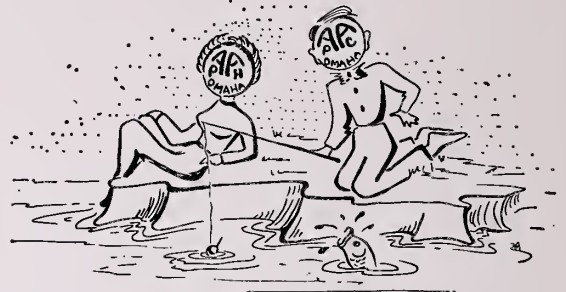
CYCLOPLEGIA AND THE OPTOMETRIST—

(Continued from Page 361)

First, there are cases in which a cycloplegia may be disastrous; namely, in cases of glaucoma in which the patient might become blind. This is especially true of the narrow angle acute type of glaucoma in patients who may never have had a previous attack. This type of eye can only be safely recognized by a well trained ophthalmologist.

Secondly, malpractice suits against the optometrist would not apply, as he is not a doctor and did not prescribe the drug. The M.D. would bear the brunt of legal action and rightly so.

Optometrists are not trained to the degree that they can judge the type of case needing cycloplegia and the great majority of them realize this and do not compromise a friendly physician in this way.



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I.C.S. TOUR SCHEDULED

"Study Abroad" will be the theme of the third world tour, postgraduate clinical course, sponsored by the International College of Surgeons.

The professional trip, leaving San Francisco, October 20, will circle the globe in 48 days. The return to New York will be December 7, with optional return routings to permit stop-over privileges in many European cities. Luxury air lines will be used to cover a wide territory in a reasonably short time. Families and friends will be accommodated.

Fellows of the International College of Surgeons have arranged lectures, clinical demonstrations and entertainment in Hong Kong, the Phillippines, Thailand, India, Turkey and Greece. Dr. Arnold Jackson of Madison, Wis., past president of the United States Section, I.C.S., will be the coordinator.

Detailed information may be obtained from the International Travel Service, Inc., Palmer House, Chicago.

NEBRASKA U SETS P. G. COURSES

Post-Graduate courses starting in September have been scheduled for the U of Nebraska Medical School.

The September 29 — October 2 course will be on "Electrocardiography."

Others in 1958 will be January 16, 17, Obstetrics; March 12, Diseases of the skin; March 27, Obstetrics; April 7-8, Pediatrics; April 9, 10, 11, Recent Advances in Clinical Medicine; May 7, Third Annual Trauma Day; and May 8-9, Allergy Conference.

All courses are approved for category I credit A.A.P.A. Course fees and \$10.00 per day. For more information write: L. A. Cappiello, M.D., U of Nebraska College of Medicine, Omaha.

The Sioux Falls Medical Assistants Association held a meeting Monday evening, August 5th in the Chamber of Commerce Room. After reading of the minutes, it was decided that Leonra Bexpaletz will give a book review of Carol Towner's recent book, and also touched upon the fact, that Dr. Roy Knowles will be our guest

speaker for the October 7th meeting. A very interesting round table discussion followed the business meeting.

MINNESOTA GP'S SCHEDULE COURSE

The Minnesota Academy of General Practice announces its 7th Annual Fall Refresher to be held at Hotel Leamington, Minneapolis, October 15 and 16. The program starting at 2 P.M. Tuesday, October 15, consists of 10 hours concentrated lectures by 22 outstanding medical teachers. Inquiries and reservations should be directed to the general chairman, John T. Pewters, M.D., 2020 1st Avenue, S., Minneapolis.

AMA MAKES MAJOR CHANGE

In a major change at AMA headquarters in Chicago, Dr. George F. Lull was named Assistant to the president and Dr. F. J. L. Blasingame of Wharton, Texas was named General-Manager. Dr. Lull will continue to serve as secretary, which is an executive office.

NEWS NOTES

The Brookings-Madison District entertained Association president, **Dr. M. M. Morrissey** at their summer meeting at the Brookings Country Club on August 1st. 26 members were present as well as a number of wives.

* * *

Over one-hundred members and wives of the Black Hills District Medical Society met for the Annual Fish Fry at Spearfish, August 8th. **Dr. B. H. Randall** of the Mayo Clinic was guest lecturer. **Dr. M. M. Morrissey** made his presidential visitation.

* * *

Drs. Aladar and Klara Horthy, Kennebec, and **Rainis Berzins**, Bowdle, were granted full licensure by the Board of Medical Examiners upon completion of four years of temporary license.

* * *

Dr. B. H. Sprague, a co-founder of the Huron Clinic died Sunday, July 14th in Hollywood, California. He left Huron in 1933.

* * *

Dr. T. H. Wrage has joined **Dr. D. N. Fedt** in practice at Watertown.

* * *

Dr. Kenneth Cole has left Lake Preston to pursue a course in legal medicine at the University of Texas. **Drs. Peter and Anna Krijger** took over his practice. They had been at Corsica for the past two years.

* * *

Dr. G. W. Hovde has joined the staff of Homestake Hospital in Lead.

MEETINGS AND SEMINARS

A course in Occupational Skin Problems is scheduled for October 28 — November 1 at the Kettering Laboratory sponsored by the University of Cincinnati. Registration fee is \$100.00. Write Secretary, Institute of Industrial Health, Kettering Laboratory, Eden and Bethesda, Cincinnati 19, Ohio.

* * *

The Bahamas Medical Conference will be held at the Fort Montagu Beach Hotel at Massau December 1-15. Hotel reservations to Mr. John L. Cota, manager of the hotel. Information from Dr. B. L. Frank, 1290 Pine Avenue West, Montreal, Canada.

* * *

A two-week, full-time course in Radiological Safety will be given from January 6 to 17, 1958, by the institute of Industrial Medicine of New York University Post-Graduate Medical School, in cooperation with the NYU College of Engineering and the United States Atomic Energy Commission.

The course is designed for industrial physicians, industrial hygiene engineers, public health officials, and individuals in industrial and university research laboratories who are responsible for radiological safety.

Tuition for the course is \$90.00. For further information write to the Associate Dean, NYU Post-Graduate Medical School, 550 First Avenue, New York 16, N. Y.

PSYCHOSOMATIC MEDICINE GROUP MEETS IN OCTOBER

The program of the fourth annual meeting of The Academy of Psychosomatic Medicine to be held October 17-19, 1957, at the Morrison Hotel in Chicago will be devoted to "Psychosomatic Aspects of Obstetrics, Gynecology, Endocrinology and Diseases of Metabolism." The meeting will be open to all scientific disciplines, as well as psychologists, social workers and nurses. Information may be obtained from Dr. William S. Kroger, Secretary, 104 South Michigan Avenue, Chicago 3, Illinois.

UROLOGY AWARDS SET FOR SPRING

The American Urological Association offers an annual award of \$1,000 (first prize of \$500, second prize \$300 and third prize \$200) for essays on the result of some clinical or laboratory research in Urology. Competition shall be limited to urologists who have been graduated not more than ten years, and to hospital internes and residents doing research work in Urology.

The first prize essay will appear on the program of the forthcoming meeting of the American Urological Association, to be held at the Roosevelt Hotel, New Orleans, Louisiana, April 28-May 1, 1958.

For full particulars write the Executive Secretary, William P. Didusch, 1120 North Charles Street, Baltimore, Maryland. Essays must be in his hands before December 1, 1957."

NEWS NOTES

(Continued on Page 41—ad sec.)

PHARMACEUTICAL SECTION



HAROLD S. BAILEY, PH.D.

EDITOR

Division of Pharmacy
College Station, South Dakota

MILFORD L. SCHWARTZ
1916-1957



Milford L. Schwartz, 41, Huron pharmacist and member of the South Dakota State Board of Pharmacy, died Friday, August 16 in St. John's Hospital, Huron.

He was born May 30, 1916 to Paul and Minnie Schwartz at Mott, North Dakota. He completed high school there and graduated from South Dakota State College in 1940. While attending college he was elected to the Rho Chi honorary pharmaceutical society and served as its president. He received the Lehn and Fink gold medal award for outstanding scholarship.

He married Eleanor Parker of Arlington June 23, 1941 in the Methodist Church of Arlington. He was employed as a pharmacist in the Tom Haggar Drug Store in Watertown and the A. K. Haggar Drug Store in Sioux Falls for six and one half years before purchasing Schwartz Pharmacy in Huron in 1948.

Survivors include his widow; one brother, Clifford, Clark; his parents, Mr. and Mrs. Paul Schwartz, Brookings; her parents, Mr. and Mrs. Claude Parker, Arlington; one brother-in-law, Robert Parker, Arlington.

He was a member of the Methodist Church, Masonic Lodge, Elks Lodge, and the Huron Country Club board of directors. He had been a member of the South Dakota State Board of Pharmacy for four years having been reappointed by Governor Foss last year to his second term.

Funeral services were held at the Methodist Church in Huron August 19 and burial was in the Arlington, South Dakota, cemetery.

Honorary pallbearers will be officers and members of the board of directors of the South Dakota Pharmaceutical Association. Honorary pallbearers will include: George A. Lehr, Rapid City; Vere A. Larsen, Alcester; Willis C. Hodson, Aberdeen; Albert H. Zarecky, Pierre; Phillip Case, Parker; Alger D. Knutson, Clark; Harold W. Mills, Rapid City; Harold L. Tisher, Yankton; J. C. Shirley, Brookings; Bliss C. Wilson, Pierre; and Glenn E. Velau, Sioux Falls. Mr. Velau is an Inspector for the Board of Pharmacy.

The family has requested that memorials be sent to the Dr. E. R. Serles Memorial Scholarship Fund of the South Dakota State Pharmaceutical Association.

PHARMACEUTICAL *Paper*



WESTERN LEADERSHIP*

by

John B. Heinz, Ph.G., Ph.M.**

Western foresight, basic ingredient in Western Leadership, was early in evidence in the Territory of Dakota. Recognition of a need and faith in the future prompted the establishment in 1881 of an Agricultural College for the Territory at Brookings, South Dakota — and just six brief years later, that same perception prompted the institution of a course in pharmacy. Since that optimistic beginning, the South Dakota State College Division of Pharmacy has more than justified the faith evidenced — for the majority of pharmacists in the state have graduated from the institution, along with some of the most prominent leaders of our profession.

Under the direction of its inspired Dean, Floyd J. LeBlanc, the enrollment has grown to more than 245, maintains its energetic membership in the American Association of Colleges of Pharmacy which was begun in 1908, features an active Student Branch of the A.Ph.A., as well as a Chapter of Rho Chi and Kappa Epsilon. The influence of this aggressive organization has not only made itself felt in its State, but throughout the professional and honorary bodies of pharmacy throughout the nation — attesting to the significance of its curriculum and the excellence of its instruction.

Underlying its accountable contribution to

our beloved profession is an approach to academic preparation which could well key the entire area of pharmaceutical education. Modestly, it is expressed by Dean LeBlanc in these simple phrases loaded with important meaning:

"The Division of Pharmacy offers an opportunity to students to earn a B.S. degree in Pharmacy or in Pharmaceutical Research. Advanced courses are offered and the Master of Science degree is conferred upon graduates of the four-year course who have completed at least one year of graduate work and who have presented a satisfactory thesis."

Dean LeBlanc continues, "The staff of the Division is primarily interested in the scientific and professional training of its students, but faculty interest extends over a much wider field. It is the objective of the Division that its students develop, not only scientifically and professionally, but that they are also provided with a general education for complete living, including full adjustment to the responsibilities of citizenship."

What a magnificent statement — develop, not only scientifically and professionally, but that they are also provided with a general education for complete living! What is this if it is not a definition of what it means to be a pharmacist! What is this if it is not the goal toward which we must strive and urge our young people to strive!

Here is derision of compromise — so modestly stated! We of pharmacy MUST excell

*Reprinted by permission of The Rocky Mountain Druggist, vol. 68, p. 7 (July 1957).

**Fellow of the American College of Apothecaries; owner, Heinz Apothecaries, Salt Lake City, Utah.

scientifically! We must keep abreast of all that comes from research and new knowledge! In a nuclear age, the age of miracles, indeed, we must jealously guard our status as scientists and assume our rightful place as leaders in the field — for our science, though age old, is, and must continue to be, as modern as tomorrow! We must extend our scientific consciousness to all phases of science — and assimilate into pharmacy, those vistas which rightfully belong in pharmacy lest we awaken to find that other pursuits have usurped what is rightfully ours! We are scientists! We must stimulate our scientific awareness! We must “develop scientifically,” even as Dean LeBlanc admonishes his students to do!

We of pharmacy MUST “develop professionally” if we are ever to achieve the professional status and recognition we so dearly espouse! We must be aware of the meaning of “professional,” its ethical responsibility, and perhaps even more important, its restrictions on personal conduct! To be professional, we cannot compromise with mediocrity in the exercise of our function! We must look professional, act professional and BE professional in every sense of the word—in all that we do, in our stores and shops, in our homes, in our community activities, yes, in our social activities! To merit professional respect demands that we guard our every thought and action! Yes, we MUST “develop professionally.” Though we have progressed much, we must see that the “professional” aspect of pharmacy leaves much to be done — and the foresight and insight as shown by Dean LeBlanc will contribute much as we strive to “develop professionally.”

“General education for complete living!” Again, Dean LeBlanc has scored! How fortunate are the students of the South Dakota State College Division of Pharmacy to have as mentors, men who recognize this need! Complete living — the harmonious relationship of man to his Creator and man to man! Here is the key to happiness and achievement! Scientific and professional development — how essential they are, but how meaningless unless they are accomplished with an appreciation for life — its finer things, its art, music, its social graces, its stimulations and inspirations! Those who

have reached the pinnacles of success have, without exception, enjoyed and fully possessed this capacity for “complete living.” As we professional, scientific pharmacists vow to serve humanity, we too are human. As we serve society, we are members of society. As we guard and preserve health and life, we too must LIVE that life, completely and fully. Otherwise, will or can we merit that final commendation, “well done good and faithful servant!” Again, from out of the West comes expression of a fundamental fact — so seldom recognized and so little fulfilled!

“Full adjustment to the responsibilities of citizenship.” Bravo! Dean LeBlanc. I have often called this recognition of our expanded responsibilities — the need to know that our purely professional and scientific practice is but part of our overall responsibility! As professional men and women, where our standards are high, and relatively few complete even the first phases of entry into our field, we MUST recognize that all phases of community life require our best efforts, our attention, our participation, our “Western Leadership.” This means in all of our professional associations. This means in all of our political, social and religious groups and organizations. Unless we recognize and meet this requirement for a “full adjustment to the responsibilities of citizenship,” we will have fallen far short of our goals and our potentials! Outreach —this is one key to professional recognition and general acceptance for pharmacy. We must all see the wisdom and need for facing up to our expanded responsibilities, or as Dean LeBlanc writes, “to develop full adjustment to the responsibilities of citizenship.”

Dean Floyd J. LeBlanc lives his philosophy — B.S., M.S., Ph.D., member of the A.Ph.A., Rho Chi, Sigma Xi, Phi Kappa Phi, South Dakota Pharmaceutical Association, South Dakota Educational Association, Rotarian and Past president of Brookings Rotary Club, registered pharmacist — this man typifies the excellence of the staff of the South Dakota State College Division of Pharmacy, the high standards of the school, and additional validity to the claim that out of the West has come, and will continue to come, leadership — in pharmacy and the nation.

But what of the graduates of South Dakota

(Continued on Page 380)

PROBLEMS OF SMALL GENERAL HOSPITALS IN SOUTH DAKOTA A SURVEY*

by

Helga Schultz, B.S., R.N.**
Brookings, South Dakota

According to a listing of licensed hospitals by the South Dakota Department of Health — Section of Hospital Facilities — South Dakota had 73 general hospitals in 1955-56. Out of these 73 general hospitals sixty had a bed capacity of 50 beds or less with an average of 23.9 beds per hospital.

South Dakota is predominately an agricultural rural state. Many people live scattered miles apart from each other and depend on the services of the small community hospital. Many of these hospitals have been built within the last ten years (Hill-Burton Act) and they are well planned and well located in an attempt to meet the needs of the community.

Student nurses have the opportunity to affiliate for six weeks in rural hospitals which usually have a bed capacity of less than 50. These experiences help to realize the importance of the small hospitals to the communities. At the same time students become acquainted with some of the problems these small hospitals have in fulfilling the obligation to the community. As the number of small hospitals increased (within the last 10 years) we became more cognizant of their problems.

Purpose of This Survey

The purpose of this survey is twofold:

1. To investigate the validity of the following basic assumptions that we have about the problems of the small general hospitals in South Dakota.

- a. That there are difficulties in recruiting personnel.
- b. That there are few qualified people available.
- c. That departmentalization (or specialization) is impossible.

- d. That the nurse has to do too many non-nursing functions and is expected to know something about everything.
- e. That the small hospitals lack finances to operate most effectively.
- f. That these hospitals are not ready to meet a disaster situation.

2. To learn from the opinion of the individuals in charge (administrators or superintendents) of the hospitals.

- a. What their main problems are.
- b. What they think can be done about it.

Method of Procedure

After preliminary interviews and discussions with three hospital administrators and several nurses employed in small general hospitals, a questionnaire was constructed. To 42 administrators of small general hospitals a questionnaire and letter were sent. Out of these 42 questionnaires 35 were completed and returned.

Findings and Discussion

1. Pharmacy

The results of the survey show that very few of the small general hospitals have the service of a pharmacist available. Almost all of the hospitals rely on the administrator, superintendent of nurses, or a registered nurse to order and dispense drugs and narcotics. How well are they prepared for this job? Some hospital administrators never had a course in pharmacology and the preparation nurses receive is usually limited to one course (one quarter or semester) in pharmacology or materia medica.

Table I
Status of Pharmaceutical Service in Small General Hospitals

Type of Service	Number of Hospitals
Full-time pharmacist	2
Part-time pharmacist	0
Consulting pharmacist	4
No pharmaceutical service	29

2. Diet

As shown by Table II, special diet planning and calculation of food allowances is most often delegated to the nurse and cook who

*A study prepared as partial requirement for the course in Comprehensive Nursing, Division of Nursing, South Dakota State College.

**Instructor in Medical and Surgical Nursing, Rockford, Illinois.

together try to work something out to the best of their abilities. Diet planning becomes somewhat more complicated if a patient is placed on a 0.5 Gm. sodium diet, a diabetic diet, etc. How much of the nurses' time is spent on diet and menu planning? How well prepared is she for this job? Usually the student nurse receives one basic course in foods and nutrition (or diets in health and disease). In addition some schools of nursing provide approximately 4 weeks of diet kitchen experience.

Table II

Status of Dietary Service in Small General Hospitals

Type of Service	Number of Hospitals*
Full-time dietician	2
Part-time dietician	3
Nurse in charge	8
Nurse and cook	12
Cook	11
Others (Doctors)	3

*Does not total 35 due to multiple types of service in some hospitals.

3. & 4. Laboratory and X-ray

Although these require specially prepared personnel, the majority of hospitals indicated that they had either full-time or part-time laboratory and/or X-ray technicians available. In 5 hospitals a registered nurse had to do laboratory work and take x-rays. These registered nurses or licensed practical nurses received their instructions from a physician or technician. (The joint committee on hospital accreditation gives less points to hospitals who employ or use less qualified or unqualified personnel.) At times the physician himself has to do laboratory work or take x-rays. Two hospitals indicated that they have specialists in radiology who come on consultation.

5. Anesthesia (for surgery)

In their basic training programs nurses are not prepared to give anesthesia. This is a function which requires specially prepared personnel. (Anesthesia has been called "a special type of nursing.") Yet, it is apparently a common practice that nurses give anesthesia. Why? First, because there is a shortage of specially trained anesthetists.¹ Second, quoting from Lesnik and Anderson, "Nursing Practice and the Law",² "Subject to the requirement that a nurse understand the cause and effect of any medical order that she is directed to perform or execute, in theory a nurse may perform any medical act provided a legal order is given. Thus a nurse may administer anesthesia . . . The right to

engage in the rendition of such functions is based upon the order plus direction and/or supervision of a licensed physician."

But how many nurses really understand the cause and effect of an anesthetic without special training and preparation in anesthesiology? If anything should go wrong with the patient both nurse and physician could be liable for malpractice. (The Nurse Practice Act of South Dakota doesn't make any reference as to nurses administering anesthesia, since anesthesia is not considered a nursing function.)

Third, the small general hospital usually doesn't have enough surgery to render the employment of a full-time anesthetist financially economical.

The status of anesthetic service in small hospitals in South Dakota is illustrated by Table III.

Should schools of nursing offer a basic course in anesthesia? Yes, not to make anesthetists out of nurses but to prepare them for emergency situations so that they may be able to serve people more safely.

Table III

Status of Anesthetic Service in Small General Hospitals

Type of Service	Number of Hospitals*
Anesthesiologist	23
Nurse Anesthetist	12
Physician (not a specialist in anesthesiology)	8

*Does not total 35 due to multiple types of service by some hospitals.

6. Disaster Program

The American Hospitals Association (A.H.A.) has urged all hospitals to set up a disaster program. Disaster planning is something which requires the cooperation and the utilization of resources from the whole community: fire department, police, community health council, leaders of the community, physicians, parents, etc. So far very little has been done. Approximately 50-60% of the 35 small general hospitals which answered this question in the questionnaire have auxiliary lights and a few have water available for emergencies. About 40% of these 35 hospitals are in the process of planning a disaster program and another 40% have not done anything about it.

7. Recruitment of Personnel

The great majority of small hospitals has difficulties in "recruiting and keeping competent nursing help," as one hospital administrator expressed it. The administrator went

on to explain that "the sample from which to select professional nurses is often limited to registered nurses who are married and live in the community, have a family, and some lack in interest in nursing." Table IV shows the types of personnel required by those hospitals questioned and the number of hospitals having difficulty in recruitment of these types.

Table IV

Personnel Desired	Number of Hospitals*
Registered Nurses	21
Nurses Aides	7
Licensed Practical Nurses	8
Other Workers	3

Why is it so difficult to attract and keep nurses in a small general hospital? The following are some of the assumed reasons:

- Lack of recreational facilities in the community. The majority of hospital administrators indicated that their communities offer only limited recreational facilities.
- Living opportunities — according to the survey this should not be a problem in recruitment of personnel because only 5 hospital administrators stated that living opportunities for nurses in the community were limited. Nobody stated "none."
- Inadequate salaries — one hospital administrator claimed that salaries were inadequate due to lack of funds. According to a spot check by the ANA of Nursing in Non-Federal General Hospitals in 1954 the current gross monthly salary of general duty nurses employed by hospitals of less than 50 beds in the Middle West is \$235.00 compared to the national medium salary of \$241.00. The American Hospital Association 1955 survey reports an average gross monthly starting salary of \$253.00, including the estimated value of maintenance furnished, for general duty nurses.

What could we do to attract more nurses to work in a small general hospital? Here are some opinions of hospital administrators taken from comments on the questionnaire:

- Rural affiliations for student nurses.
- Better salaries for nurses.
- Better working hours. (Due to shortage of nurses in some hospitals the nurses employed there over-work).
- Recruit enough auxiliary help for part-

time employment when needed. According to a study by Pollak, Otto and others³: "... the time required for non-professional work which graduate nurses are called upon to perform, such as clerical and housekeeping tasks, represents an important source of personnel shortage in nursing."

8. Preparation of Nurses

Is there any area of preparation in which nurses lack to function more affectively in a small hospital? This question received some of the following answers:

- Five administrators felt that nurses didn't lack in preparation.
- Eight administrators: Nurses need more preparation in obstetrics.
- Five administrators: Nurses need more preparation in operating room.
- Two administrators: Nurses need more preparation in anesthesia.
- One administrator: Nurses need some preparation in laboratory.
- One administrator: Nurses need some preparation in x-ray.
- One administrator: Nurses need some preparation in advanced nursing procedures (e.g., IV, gastric intubation, etc.)
- Four administrators: Nurses should be flexible and be able to work in or know something about every department in a small hospital.
- Nurses need more preparation in interpersonal relationships. (This is confirmed by other studies as well. Bernstein, Lewis and others⁴ state: "Several current emphases in nursing point to the growing need for more adequate skills and attitudes in nurse-patient relationships.")
- Ability to adapt (or adjust) to a small hospital and its routine. Schools of Nursing are usually in large hospitals. No wonder a new graduate may find it difficult to function well in a small hospital where so many different tasks are required of her. It would be interesting to know how well the curricula of the nursing schools attempt to prepare the student nurse for a small general hospital.

9. Fiscal

There are apparently few hospitals which do not have difficulties in collecting bills. In

V stands for—greater antibiotic
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is a new and superior form of
widely prescribed broad-spectrum
in the treatment of more than
ACHROMYCIN V Capsules are
practically twice the absorption
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ACHROMYCIN V is now available in — **CAPSULES**. (Pink) 250 mg., 100 mg. (tetracycline HCl equivalents, phosphate-buffered.) **SYRUP**. Each teaspoonful (5 cc.) of orange-flavored syrup contains 125 mg. of tetracycline HCl activity, phosphate-buffered. **LIQUID PEDIATRIC DROPS**. Each cc. (20 drops) contains 100 mg. of tetracycline HCl activity, phosphate-buffered. (Approx. 5 mg. per drop). Orange Flavor. Plastic dropper-type bottle of 10 cc.

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MYCIN* V

Tetracycline Buffered with Phosphate

ACHROMYCIN* Tetracycline—the
antibiotic, noted for its effectiveness
50 different infections. New
rapid-acting, offer an average of
in half the time—unsurpassed
therapy.

ACHROMYCIN V dosage: 6-7 mg. per lb. of body weight per day for children and adults.

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*Reg. U.S. Pat. Off.

LEDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER, NEW YORK



the "Hospitals" magazine we can find numerous articles on accounting and hospital financing. Table V shows suggestions of hospital administrators taken from this survey as to how they think it could be made easier for people to pay their bills.

Table V
Administrators' Suggestions on Hospital Bill Financing

Suggestion	Number of Administrators
More people insured	8
Better insurance coverage	5
Monthly payments	3
Prepayment plan	2
Savings accounts	1
Bank Loans	3
Planning for emergencies	2
Credit Agency loans	1
Better crops	1

This survey indicates that on the average approximately 60% of all hospitalized individuals have some sort of insurance for hospitalization. The variation ranges from 15% in some hospitals to as much as 80 to 90% in others. The majority of patients in the small general hospitals in South Dakota depend on farming and ranching for their income.

10. Hospital Administration Difficulties

Administrators of small general hospitals in South Dakota were also asked for their opinions concerning what they thought were their main difficulties encountered in hospital administration. The results are presented in Table VI without comment.

Table VI
Problems Encountered by Small Hospital Administrators

Problem Expressed	Number of Administrators
Lack of Competent Help	11
Bill Collection	7
Finances	8
Personnel	3
Public Relations	2
Insufficient Administrative Time	3
Over-worked Personnel	2
Lack of Professional Interest and Responsibility by Nursing Staff	3
Lack of Beds	1
Lack of Physician Cooperation	1
Inability to obtain Part-time Help	1
Geriatric Department	1
Lack of Clerical Help	1
Lack of Operating Room	
Nursing Staff	3

SUMMARY AND CONCLUSIONS

Since 60 out of 73 general hospitals in South Dakota have a bed capacity of 50 beds or less, this survey was undertaken to (1) test the validity of some assumptions concerning problems of small general hospitals; (2) to find out what some specific problems of hospital administration are; and (3) what the hospital administrators think can be done about it.

The result of the survey indicated that nurses (1) spend a lot of time doing non-nursing functions (e.g., ordering drugs, planning diets, taking x-rays, doing laboratory procedures, giving anesthesia, clerical work, etc.); (2) are expected to be flexible and know something about every department; (3)

need more preparation in obstetrics and operating room; (4) knowledge to administer anesthesia seems desirable — also x-ray and laboratory work; (5) that there is a need for good quality nurses; (6) that many small general hospitals have financial difficulties; and (7) that there is a need for more disaster planning.

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FDA WARNING ON PARALDEHYDE

The potentially hazardous nature of Paraldehyde, which because of long storage in a partially filled bottle, can convert to acetic acid and cause death, was brought to light by the Food and Drug Administration who recently investigated a death caused by Paraldehyde which was stored under these conditions. All pharmacists should observe the U.S.P. monograph for the drug and practicing pharmacists should be warned in order to prevent a similar occurrence. U.S.P. monograph states: "Preserve Paraldehyde in a well filled, tight, light resistant container which holds not more than 120 Grams, preferably at a temperature not above 30°."

NARD CONVENTION

The world of drugdom will converge upon Minneapolis, Minnesota, during the period of October 6th through 10th, for the 59th annual convention of the National Association of Retail Druggists.

Plans are well underway to make this convention the biggest in history, with the local host chapter and national committees co-operating to assure a memorable combination of business and pleasure for all who attend.

On the pleasure side of the convention, there will be five full nights of entertainment, including a colorful Ice Carnival and a host of radio, screen, and TV starts . . . For the ladies, three fabulous luncheons are planned . . . There will be prizes galore throughout the convention and drug show.

PRESIDENT'S PAGE

Rx



Fellow Pharmacists:

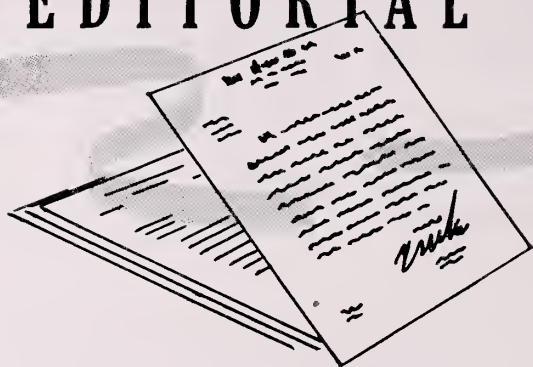
I would like to take this opportunity to welcome all the pharmacy graduates of this spring to our association and wish them all the success they so rightfully deserve in their chosen profession. I would be glad to help you with your problems if within my power to do so.

The National Association of Retail Druggists' Convention is being held in Minneapolis, Minnesota, on October 6 through 10. I would like to see a very substantial representation from our South Dakota Association present at that meeting. I am sure that you will be delighted and be well repaid for your time and effort in attending the Convention. We are fortunate that it is being held so close to South Dakota as it is this year.

I hope to see and talk with many of you at this Convention.

Very truly yours,
George Lehr, President

EDITORIAL PAGE



1957 NATIONAL PHARMACY WEEK, OCTOBER 6-12

The 31st annual observance of National Pharmacy Week is scheduled for the week of October 6 to 12 according to an announcement by J. Warren Lansdowne, Chairman of the Public Relations Committee of the American Pharmaceutical Association which sponsors National Pharmacy Week.

The 1957 theme for National Pharmacy Week reemphasizes the slogan, "Your Pharmacist Works for Better Community Health."

National Pharmacy Week has been Organized Pharmacy's most effective public relations program. For more than thirty years it has provided individual pharmacists with the opportunity and necessary material for calling public attention to the important role which the nation's pharmacists play in the promotion of better community health through adequate pharmaceutical service.

A window display contest will again be one of the features of the observance. Cash prizes, plaques, and certificates will be awarded at the annual A.Ph.A. convention in Los Angeles next year for outstanding displays in the four categories of competition — retail pharmacy, public exhibits, colleges and hospitals.

Every pharmacy in the nation will receive by mail a National Pharmacy Week window streamer. Accompanying the streamer will be a folder outlining the complete rules of the display and exhibit contest in all four categories of competition. Also accompanying this mailing will be a participation order form listing more than fifteen publicity aids for use by individual pharmacists and pharmaceutical associations.

The publicity aids include public addresses, radio and television scripts and spot announcements, newspaper editorials, and advertising mat and suggested proclamations for use by governors and mayors. This material is available from A.Ph.A. Headquarters at a nominal cost.

An attractive kit consisting of suggestions for public addresses, radio and television scripts and announcements, suggested proclamations for use by governors and mayors, suggested newspaper editorials and window display ideas may be obtained at a cost of \$2 for the entire kit. Individual items in the kit may be ordered at nominal cost as indicated on the participation order form which accompany the mailing to pharmacists.

The following seven-point program has been suggested by the Committee:

1. Order your Public Relations Kit today from A.Ph.A. Headquarters. The Kit containing 15 publicity aids is available at \$2.00; individual items may be ordered, if desired.
2. Plan to install a National Pharmacy Week window display and an exhibit in a public building in your community. Be sure to have the display photographed and entered in the contest.
3. Request your governor and mayor to issue a proclamation designating the week of October 6 to 12 as National Pharmacy Week. Enlist the aid of state and local association secretaries in securing such proclamations.
4. Contact the secretaries and program chairman of civic and service clubs and other organizations now, requesting that a pharmacist be given a place on their program during the week of October 6. Be ready to suggest someone as a speaker if asked to do so.
5. Arrange now for program time with station managers and program directors of local radio and television stations.
6. See local newspaper editors now regarding editorials and special feature articles.
7. Place a National Pharmacy Week advertisement in your local newspaper.



RECENT PHARMACEUTICAL *Specialties*

PARACORTOL TABLETS

Description: Paracortol is Parke-Davis brand of prednisolone which is an analog of hydrocortisone. It exhibits from three to five times the corticosteroid activity of cortisone or hydrocortisone and reduces tendency to cause sodium or fluid retention or potassium depletion.

Uses: Treatment of numerous conditions including bronchial asthma, allergic dermatoses, rheumatic fever, rheumatoid arthritis, and other collagen diseases, inflammatory eye diseases, nephrosis and certain blood disorders.

Dosage Form: In 2.5 mg. grooved tablets in bottles of 30 and 100, and in 5 mg. grooved tablets in bottles of 30 and 100.

Source: Parke-Davis.

FURADANTIN ORAL SUSPENSION

Eaton Laboratories has changed its Furadantin Oral Suspension bottle, making it conform to a standard dispensing size. Attractive in design, the new bottle of 60 cc. supplants the old one of 4 fl. oz. Furadantin, one of the antimicrobial nitrofurans, is used in treating genitourinary tract infections.

TRICOFURON

Tricofuron now in "puffer" bottle. Eaton Laboratories offers Tricofuron Vaginal Powder in a plastic "puffer" bottle for easy insufflation. The distinctive navy blue and grey carton also contains three sanitary disposable tips in a hermetically sealed plastic envelope. For vaginal trichomoniasis, Tricofuron contains Furoxone, one of the antimicrobial nitrofurans.

FURACIN WATER MIX VETERINARY

Description: Furacin Water Mix Veterinary is a yellow powder containing Furacin 4.59% in a stabilizing, water-soluble base for medicating drinking water.

Uses: Furacin Water Mix Veterinary is indicated for the control of outbreaks of cecal and intestinal coccidiosis due to *Eimeria tenella* and *E. necatrix*. It is especially convenient for treatment of infected flocks which are off feed. There is no deleterious effect on eggs or egg production. It is also effective in the treatment of infectious necrotic enteritis in swine.

Dosage: Use only clean drinking water. One level scoopful (16.5 Gm.) makes 2½ gallons of medicated water. Administer for at least 7 days, or longer if needed. Rapidly catabolized, the drug can be administered in water up to the time of slaughter.

Note: Discard solutions in waterers once daily, if dirty. Prepared water solutions of Furacin Water Mix Veterinary will deteriorate if allowed to remain in continuous contact with metal over 7 days.

Dosage Form: Carton containing 330 grams with a standard measuring scoop. This medicates 50 gallons of drinking water. Available to veterinarians only.

Source: Eaton Laboratories, Norwich, N. Y.

FURADANTIN INTRAVENOUS SOLUTION

Description: Furadantin I.V. is a new dosage form of 0.6% Furadantin, dissolved in polyethylene glycol 300. It is supplied in 10 cc. ampules, each containing 60 mg. of Furadantin. The solution is sterile and

must be dissolved aseptically in a sterile diluent before use.

Uses: Furadantin I.V. is indicated in bacteremia, septicemia, peritonitis and other bacterial infections, as of postoperative wounds and abscesses, when the organism is susceptible to Furadantin. It is equally useful in severe genitourinary tract infections where the patient is unable to take Furadantin by mouth or where higher blood levels than can be obtained by peroral administration are desired.

Dosage: The recommended diluent for Furadantin I.V. is 5% dextrose or fructose solutions, but it is compatible with normal saline and 1/6 M sodium lactate solutions. Administered as an intravenous drip, the average dose for an adult is 30 cc. (3 ampules) in at least 500 cc. of diluent. Two such doses are given over 24 hours and continued, if necessary, for seven days.

Side Reactions: Nausea or emesis may occur occasionally and sensitization rarely. No stomatitis, colitis, proctitis, anal pruritus, monilial superinfection, staphylococcic enteritis or renal, hepatic or hemic toxicity have been reported. If an occasional case of muscle twitching occurs, treatment should be discontinued.

Dosage Form: Sterile 10 cc. ampules (60 mg. of Furadantin each), box of 12.

Source: Eaton Laboratories.

FLEET ENEMA DISPOSABLE UNIT

Description: The FLEET ENEMA Disposable Unit is now available with a prelubricated rectal tube attached to the polyethylene bottle. This unit is ready for use after removal of the protective rectal tube cover. A unique diaphragm prevents leakage and controls the flow, and the anatomically correct tube minimizes injury hazard. A new green carton, unusual in design, sets forth directions for administration in a simple, easily understood manner.

Uses: A routine enema, FEDU is employed for preoperative cleansing and general postoperative use; in preparation for proctoscopy and sigmoidoscopy; to relieve fecal or barium impactions.

Dosage: Adults: 4 oz. Infants and children: 2 oz. or as directed by physician.

Dosage Form: In single units.

Source: C. B. Fleet Co., Inc.

SAFF

Description: A source of essential unsaturated fatty acids. Saff is a palatable, highly stabilized emulsion of safflower oil in water, containing 46% linoleic acid glyceride. It contains less than 13% oleic acid glyceride and 5% saturated fatty glyceride.

Uses: It has been repeatedly observed that ingestion of highly unsaturated fats, especially in the absence of other kinds, tends to reduce elevated cholesterol blood levels. For these reasons, administration of Saff may well be indicated in the management of atherosclerosis.

Saff is also useful as a concentrated source of calories where weight gain is desirable. A maximum concentration of essential fatty acids gives Saff an important nutritional advantage over comparable products containing mostly saturated fats.

The use of Saff is a convenient method of increasing fat intake during X-ray examination of the gall-bladder.

Saff may also be employed as a research tool in the study of conditions which may be associated with deficiency of essential fatty acid or with similar dietary imbalances.

Dosage: The recommended dosage of Saff is five tablespoonfuls a day. This dose contains approximately 50 GM. of fat, or the equivalent of 35 Gm. of linoleic acid. Saff supplies approximately six calories per cc., 90 calories per tablespoonful, or 450 calories in the daily dosage.

Whenever Saff is used for any purpose other than to promote gain of weight, it is preferable to reduce the intake of saturated fats, such as animal fats and hydrogenated vegetable oils.

The recommended daily dosage of Saff should generally be administered in divided doses.

Saff can be mixed with all common beverages, and with a number of foods.

Dosage Form: Saff is a palatable emulsion containing 8% Sucrose; a light flavoring Butterscotch; in 1-pint bottles (list No. 6916). At five tablespoons a day, a pint represents a six-day supply.

Source: Abbott Laboratories.

EARDROPS TRON-OTO

Description: A solution in eardrop form containing Tronothane 1%, Erythrocine 5 mg.,

Polymyxin B 10,000 units, Polyethylene glycol 10% in enough propylene glycol base to make 1 ml.

Uses: Intended to give an effective local anesthetic action along with a broad spectrum of antibiotic action to control superficial infection of the ear.

Dosage: Three to four drops applied into the external ear three or four times daily. To insure penetration, patient should lie with affected ear uppermost for a minute or two after instillation.

The incidence of sensitivity to each active ingredient of Tron-Oto is extremely low. Nevertheless, if evidence of sensitivity occurs in the rare patient treatment should be discontinued.

Dosage Form: 5 cc. bottle with dropper assembly.

Source: Abbott Laboratories.

HYDELTRASOL AND NEO-HYDELTRASOL

Description: Lotions and sterile ophthalmic solutions, have been released for national distribution by Merck Sharp & Dohme, Division of Merck & Co., Inc.

Both products, in their various dosage forms, provide uniform and higher effective concentrations of the steroid prednisolone for topical use. They have proved 2,000 times more soluble than hydrocortisone free alcohol and are pharmacologically compatible with ocular and other body tissues and fluids. Both Hydeltasol and Neo-Hydeltasol contain prednisolone 21-phosphate (as sodium salt); in addition Neo-Hydeltasol contains the antibiotic neomycin which exhibits a wide range of topical antibacterial activity against both gram-positive and gram-negative bacteria.

Uses: Indications for sterile ophthalmic solutions and ointments of Hydeltasol and Neo-Hydeltasol are various forms of conjunctivitis, iridocyclitis, keratitis, herpes zoster ophthalmicus, corneal ulcers and injuries and blepharitis. Neo-Hydeltasol is indicated especially if the inflammatory conditions are complicated by infection.

Dosage: Suggested dosage for sterile ophthalmic solutions is 1 or 2 drops into the conjunctival sac hour during the day and every two hours during the night as initial therapy. Three or four instillations daily into the conjunctival sac every are suggested in

(Continued on Next Page)

EVERY WOMAN WHO SUFFERS IN THE MENOPAUSE DESERVES "PREMARIN"

*widely used
natural, oral
estrogen*

AYERST LABORATORIES
New York, N. Y. • Montreal, Canada

5645

WESTERN LEADERSHIP—

(Continued from Page 370)

State College Division of Pharmacy. How have they fared? To read the roster is to read the "Who's Who of American pharmacy: Dr. E. R. Serles, Dean, College of Pharmacy, University of Illinois; Dr. Noel Foss, Dean, College of Pharmacy, University of Maryland; Dr. L. David Heiner, Dean, College of Pharmacy, University of Utah; Dean Byrl Benton, College of Pharmacy, Drake University; Dean Willis Brewer, College of Pharmacy, University of Arizona — Dean LeBlanc himself — these are the "proof of the pudding." These fine men, along with literally dozens of others attest to the fulfillment of a goal, justification of faith, rewards of the foresight of those pioneers of Dakota Territory who saw a need, established a school, staffed it well and "made it go!"

A relatively small state population-wise, huge geographically, but inspired academically, South Dakota has come forward with a Division of Pharmacy at its State College at Brookings that is second to none in the nation when it comes to the excellence of its products!

As we commend Dean LeBlanc and his staff, we should resolve:

To come to know these people and this institution, to support them and it, to encourage their efforts in behalf of our profession;

To adopt as our goal, if not our creed, the objectives of this institution as OUR objectives: "To develop, not only scientifically and professionally, but to develop for complete living, including full adjustment to the responsibilities of citizenship."

RECENT PHARMACEUTICAL SPEC.—

(Continued from Page 379)

use of ophthalmic ointments.

Hydeltrasol and Neo-Hydeltrasol in topical lotions are indicated for various dermatological diseases. Suggested treatment is two to three daily applications to the affected area.

Dosage Forms: Both Hydeltrasol and Neo-Hydeltrasol are available in 2.5 cc. and 5 cc. dropper bottles of sterile ophthalmic solution; in 3.5 Gm. (1.8 oz.) tubes of ophthalmic ointment and in 15 cc. (½ fl. oz.) plastic squeeze bottles of topical lotion.

Source: Merck Sharp and Dohme.

when anxiety and tension "erupts" in the G. I. tract...

IN GASTRIC ULCER



PATHIBAMATE*

Meprobamate with PATHILON® Lederle

Combines Meprobamate (400 mg.) the most widely prescribed tranquilizer . . . helps control the "emotional overlay" of gastric ulcer — without fear of barbiturate loginess, hangover or habituation . . . *with PATHILON (25 mg.)* the anticholinergic noted for its extremely low toxicity and high effectiveness in the treatment of many G.I. disorders.

Dosage: 1 tablet t.i.d. at mealtime. 2 tablets at bedtime.

Supplied: Bottles of 100, 1,000.



*Trademark

® Registered Trademark for Tridihexethyl Iodide Lederle

LEDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER, NEW YORK

PHARMACY

Rx

News

CONVENTION REPORTS

REPORT OF THE SECRETARY SOUTH DAKOTA STATE PHARMACEUTICAL ASSOCIATION SOUTH DAKOTA STATE BOARD OF PHARMACY Bliss C. Wilson, Pierre

Our books and records were audited for the year ending May 31, 1957 by Keenan and Craig, Certified Public Accountants, Aberdeen, South Dakota. Financial figures of this report are based on this audit report which is for the fiscal year beginning June 1, 1956 and ending May 31, 1957.

The secretary's receipts from the annual renewal of pharmacist and assistant pharmacist certificates is credited to the Association's General Fund Account. Tax monies received during the fiscal year amounted to \$8,447.00. Expense warrants issued against the General Fund during the same period were \$8,382.00. The gain in this account for the year was \$64.81.

The secretary's receipts from all other sources is credited to the Commercial and Legislative Section Fund Account. Receipts to this

fund during the year were \$4,701.35. Expense warrants drawn during the same period totaled \$4,952.53. The net loss in this account for the year was \$251.18. When we deduct the General Fund gain from the C. & L. Section Fund loss, we have \$186.57 which is the Association's LOSS in NET WORTH during the fiscal year. It should

be explained that this was a legislative year and voluntary drug store memberships were not sufficient to cover this added expense. If your pharmacy does not have a 1957 Drug Store Member Card, an application blank may be procured from the secretary during this convention.

Association Membership Report

Pharmacists in good standing on June 13, 1956		855
ADD: Reinstated by renewal payments	11	
Registered by Reciprocity	3	
Registered by Examinations — January 10, 1957	11	
Registered by Examinations — June 6, 1957	31	
		56
Total		911
SUBTRACT: Pharmacists deceased	14	
To Honorary Memberships	46	
Renewals unpaid for 1956-1957	12	
		72

Pharmacists in Good Standing on June 21, 1957	839
Assistant Pharmacists in Good Standing on June 21, 1957	2
Certificate Renewals Record	
1956-57 Certificate Renewals paid to June 21, 1957	779
1956-57 Free renewals to Members in Armed Forces	22
Original Certificates valid to September 30, 1957	14
Certificates due on June 6, 1957 examinations	31

Less 1956-57 renewals paid by pharmacists now deceased	7
Certificates in good standing as of June 21, 1957	839
Assistant certificates in good standing as of June 21, 1957	2
Honorary Membership Records	
Honorary Members published 1955 proceedings	16
Honorary Members published 1956 proceedings	46

	Total	62
Honorary Members reported deceased		1
Honorary Members as of June 21, 1957		61

The secretary's receipts for the State Board of Pharmacy for the year ending May 31, 1957 were the largest on record — \$15,593.00. Warrants issued during the same period totaled \$13,674.78. This leaves a GAIN in NET WORTH for the Board of Pharmacy account of \$1,918.-22.

All cash received by the secretary's office was remitted to the Treasurer on or before the last business day of each month. A detailed record will be published in the proceedings.

Reciprocity

Twenty-two South Dakota Pharmacists have applied for reciprocity to other states during the fiscal year ended May 31, 1957. Three pharmacists were admitted to Association membership by reciprocity at the January 10th meeting. Three more reciprocity applications are on file and two of these candidates are expected to appear in Rapid City for final consideration of their N.A.-B.P. applications.

Interne Certificates

Sixteen graduates from the Division of Pharmacy in 1956, applied for and received Pharmacy Interne Certificates which expired with the Board of Pharmacy examinations meeting of June, 1957. Of the thirty-five graduates from the Division of Pharmacy in 1957 who lacked practical experience for taking the complete Board examinations, only fourteen have accepted employment in South Dakota. These fourteen graduates will be eligible for Interne Certificates

if they receive an average grade of 75%, or more in their written subjects; such certificates will be valid to the June, 1958 examinations meeting.

Apprentice Registrations

The Board of Pharmacy issued 132 apprentice registrations during the fiscal year ended May 31, 1957. A separate registration is required for each period of employment and which is not concurrent with time spent in a college of pharmacy. The survey made with regard to apprentice registration and practical experience showed that pharmacy managers in South Dakota are nearly 100% for a year of practical experience as a qualification for licensure. A large majority favored giving credit for experience during vacation periods after high school graduation as we now do in our state. If you have high school graduates in your employ who are interested in a career in pharmacy, you

should advise them to register their experience with the South Dakota Board of Pharmacy. The fee is one dollar. Application blanks may be procured from the Division of Pharmacy or from our office in Pierre.

Residential Distribution of Pharmacists Registered in South Dakota

(Residence as of February 8, 1957) South Dakota — 511; Minnesota — 95; California — 35; Iowa — 30; Nebraska — 23; Washington — 13; North Dakota and Ohio — 11 each; Arizona—10; Colorado, Illinois and Oregon — 8 each; Montana — 7; Kansas and Wyoming — 5 each; Alaska, Indiana and New York — 4 each; Missouri, Oklahoma, Texas and Wisconsin — 3 each; D. C., Florida, Georgia, Michigan, New Mexico, Utah, Virginia — 2 each; Canal Zone, Idaho, Maryland, Nevada, New Jersey and Pennsylvania — 1 each. Addis Abbaba, Ethiopia — 1.

Permits to Conduct a Registered Pharmacy

Pharmacy Permits effective on June 13, 1956	253
Less - Permits not renewed for 1956-57	4
(Corner Drug, Canton-consolidated)	
(Andes Drug, Lake Andes)	
(McIntosh Pharmacy, McIntosh)	
(Orient Drug, Orient)	
Pharmacy Permits renewed for 1956-1957	249
Add - New Pharmacies Established during the year	4
(Kendall's Clinic Pharmacy, Brookings)	
(Bel Aire Drug Co. Inc., Sioux Falls)	
(Lewis South Gate Drug, Sioux Falls)	
(Aberdeen Medical Clinic Pharmacy, Aberdeen)	
TOTAL Permits Issued for 1956-1957 fiscal year	253
Pharmacies discontinued during year	5
(Corsica Drug, Corsica)	
(Deadwood Drug, Deadwood)	
(P. Bernhardt Drug, Sioux Falls)	
(Gurtel Drug, Sioux Falls)	
(Mueller Pharmacy, Wessington Springs)	
Pharmacy Permits in effect on June 21, 1957	248

* * * * *

Ownership of Merchandise and Fixtures of South Dakota Pharmacies:	
By Pharmacists ONLY—(Individual or Partnership)	160
By Non-Pharmacist in whole or in part	39
By Corporations	49

TOTAL 248

Licenses Issued to Non-pharmacists

Licenses to retail selected Household Remedies were issued to one hundred thirty-one (131) non-pharmacists who are registered by examinations in such selected household remedies and who are conducting a retail place of business situated not less than eight miles from a registered pharmacy in this state. Of this number twenty-one (21) were registered by examinations during the fiscal year ending May 31, 1957.

Poison Licenses: At the time of last year's convention 583 retail stores were licensed by the Board of Pharmacy to sell certain poisons during the calendar year 1956. The total number of 1956 Poison Licenses issued to non-pharmacists was 619. Because pharmacists are not yet required to segregate their sales display of packaged poisons from sales display of general merchandise, it was necessary to postpone the effective date of Individual Poison License Certificates to January 1, 1958. Up to the present time, 582 non-pharmacy retail places of business have been licensed to sell certain poisons for the 1957 calendar year.

Patent and Proprietary Medicine Licenses: Another all-time high has been reached in the issuance of licenses to non-pharmacists who own or manage a retail place of business other than a registered pharmacy, and for selling in original packages any medicine which is marketed under a TRADE-NAME and which is labeled for over-the-counter sale. One thousand nine hundred

twenty-four (1924) of these licenses were issued by the Board of Pharmacy to non-pharmacists for the 1956-57 fiscal year. Here is the number of Patent Medicine licenses issued since I have

Aug. 1, 1941-1942	177
1942-1943	788
1943-1944	832
1944-1945	925
1945-1946	1000
1946-1947	1040
1947-1948	1001
1948-1949	1040
1949-1950	1097
1950-1951	1163
1951-1952	1207
1952-1953	1379
1953-1954	1780
1954-1955	1808
1955-1956	1883
1956-1957	1924

been Secretary of the Board of Pharmacy:

What will be the number in 1957-1958? My estimate is 2000, or more. South Dakota pharmacies can have ninety-nine per cent of the packaged medicine business that is now going to these 1924 non-pharmacies after July 1, 1958, IF the profession is controlled and regulated in the retailing of such medicines, and proposed regulations become effective on that date.

Veterans Administration Prescription Service

During the past year, South Dakota pharmacies were paid \$1,078.52 for VA prescriptions processed by our office. This is about \$100.00 less than the volume for the preceding year. The reason for reduction in VA Rx volume is not with the Veterans Administration in Washington, D. C., but with the State VA in Sioux Falls.

It was explained at our National Association Secretaries' Conference that Local Managers of VA Centers set the policy with regard to having prescriptions mailed to the VA Pharmacy for filling. It might be advisable to have a committee appointed by the incoming president to meet with the Manager of the Sioux Falls Veterans Administration Center in this regard. At the direction of the Executive Committee I have signed a renewal contract with the Veterans Administration for the year ending June 30, 1958.

Commercial and Legislative Section

This was a legislative year and while I did not register as a lobbyist, I spent much of my time during the sixty-day session with legislative matters. You have received copies of the Uniform Narcotics Law as amended by the 1957 session. A Bill to repeal Fair-Trade was killed in committee. The cosmetician's Bill was amended for the benefit of druggists before final passage. Our Attorney's fee for the session was \$300.00. Phone calls on Fair-Trade was \$24.22 beside postage and other expense. Funds available for paying this legislative expense were \$251.18 short. If we can get an additional thirty-two (32) Voluntary Drug Store Members for 1957, it will cover this legislative expense deficit. Application cards for 1957 Drug Store Membership are available from the secretary.

Respectfully submitted,
Bliss C. Wilson, Secretary

**REPORT OF THE STATE
BOARD OF PHARMACY**
Harold W. Mills, President
Rapid City

To the Honorable Joe Foss
Governor of South Dakota

The Board of Pharmacy is pleased to submit a report of its activities for the fiscal year, June 13, 1956 to June 21, 1957 as provided in SDC 27.1006. Four meetings of the Board were held during this period.

The first meeting was held in Sioux Falls on June 14, 1956. Harold W. Mills was named official delegate to the National Association of Boards of Pharmacy convention to be held in New York City in 1957 and the secretary was named as the alternate delegate thereto. One pharmacist manager appeared at this meeting with regard to keeping a pharmacy open for the transaction of business without leaving a pharmacist in charge; on promise of future compliance no further action was taken. The secretary was ordered to notify a non-pharmacist owner of a pharmacy that a relief pharmacist must continue in charge until grade reports verified the registration of a newly employed manager.

President Milford Schwartz, Harold W. Mills and Secretary Wilson attended the Fifth District Meeting of Boards and Colleges of Pharmacy in Fargo, North Dakota, October 21, 1956. At this meeting Harold W. Mills was elected President of the Board for the ensuing year. The Board ordered the secretary to send notice by certified mail to the manager and owners of a pharmacy where inspection reports showed

that such pharmacy was being operated without a pharmacist in charge at all times. Official action was taken at this meeting to postpone the effective date of Rules and Regulations adopted pursuant to the provisions of SDC 22.12, as amended and pertaining to personal poison license certificates, for a period of one year to January 1, 1958. A like postponement in the effective date was also made for Rules and Regulations adopted pursuant to the provisions of Chapter 27.10 SDC and under the heading — "SECTION J — POISONS, DEFINITIONS AND RETAIL SALES."

At a meeting in Brookings on January 9, 10, 1957 the Board conducted examinations in Practical Pharmacy-Laboratory and Oral. The following candidates were granted licentiate certificates as a result to these examinations:

Board actions taken at the Brookings meeting on January 9, 10, 1957 include:

(1) That the Board of Pharmacy suspend the certificates

of delinquent pharmacists who have failed to keep their certificates in good standing by payment of annual registry fees as provided by law and who have been notified by the Secretary by registered mail-return receipt of the renewal fees due on their certificates and who have failed to pay the same to the secretary on or before March 15, 1957.

(2) That the Board of Pharmacy formulate regulations or recommend revision of SDC 27.1008 to the effect that on and after July 1, 1958, that pharmacy interne certificates shall be granted and issued only to candidates for licensure who have completed six (6) months, or more, of their practical experience requirement for registration as Registered Pharmacists.

(3) That the Board of Pharmacy recommend that proposed legislation for the licensing of drug clerks be withheld from introduction at the 1957 session of the State Legislature and until further discussion of the effects of such legislation can be explained at the Rapid

**Certificate
Number**

Pharmacist

Address

3205	Harold Duwayne Backlund, B.S.
3206	Ronald E. Beatty, B.S.
3207	Bruce R. Beier, B.S.
3208	George J. Belbas, B.S.
3209	Thomas Niles Bischke, B.S.
3210	William J. Durick, B.S.
3211	Donald J. Entwisle, B.S.
3212	Mrs. H. Joan Green, B.S.
3213	Allen A. Pfeifle, B.S.
3214	Robert Lee Schlueter, B.S.
3215	C. L. Hildegard Skage, B.S.

Watertown, S. Dak.
Sioux Falls, S. Dak.
Freeman, S. Dak.
Sioux Falls, S. Dak.
Eureka, S. Dak.
Clear Lake, S. Dak.
Dell Rapids, S. Dak.
Brookings, S. Dak.
Sioux Falls, S. Dak.
Canistota, S. Dak.
Toronto, S. Dak.

Reciprocal licentiate certificates were granted on January 10, 1957 as follows:

R3202	Lyle Elmer Anderson, B.S.
R3203	Arend Hoff, B.S.
R3204	James W. Ryan, B.S.

Aberdeen, S. Dak. (North Dakota)
Sioux Falls, S. Dak. (Iowa)
Webster, S. Dak. (North Dakota)

City meeting of the South Dakota Pharmaceutical Association.

The Board conducted the annual examinations for licensure at Brookings on June 4, 5, 6, 1957. Forty-seven college graduates took the written subjects as set forth in Board Regulations. Eleven of the new applicants had completed practical experience and they were examined in Practical Pharmacy-Laboratory and Oral along with twenty-two candidates who had completed practical experience since the last examinations meeting. (Note-Successful candidates will be listed in the 1957 proceedings.)

Rule and Regulation numbered "2" under "SECTION B—PHARMACY INTERNE CERTIFICATES" was amended at the meeting on June 6, 1957 to be in full force and effect on and after July 1, 1958. Such amended Rule and Regulation reads as follows:

"2. Before any such qualified candidate shall take charge of a pharmacy in this state during temporary absence of the pharmacist manager thereof, he shall apply for pharmacy interne certificate on the form supplied with his grade report. His pharmacist supervisor shall endorse such application and agree to be responsible for any pharmacy service performed by the applicant during the period for which the certificate may be issued and provided no pharmacy interne shall be left in

charge of a prescription department in any pharmacy in this state until such pharmacy interne shall have acquired at least six (6) months of his practical experience requirement."

It has been the policy of the Board to enforce the laws pertaining to Pharmacy in the interest of public health to the best of our ability. I believe that the interest shown in pharmacy today by attendance at this convention will be direct cause of passing better controls for pharmacy as a profession in the State of South Dakota.

In closing, I wish to thank the co-members of the Board and its officers for the pleasure I have had in working with them during the past nine months, as president of the Board.

Respectfully submitted,
Harold W. Mills, President

REPORT OF BOARD OF PHARMACY INSPECTOR 1957

Glenn E. Velau

Gentlemen:

The past twelve months as inspector for the South Dakota State Board of Pharmacy, I have traveled 27,416 miles and have made 2,937 inspections in all types of businesses selling drugs, patent medicines and poisons. I have attended all Board of Pharmacy meetings. Visits with each Board member have been made from time to time in regards to problems and conditions regarding Pharmacy in their respective districts.

All violations of the phar-

macy laws have been reported to the State Board of Pharmacy and all violations have been corrected by the violators and each one has cooperated with the Board of Pharmacy Inspector. Poison and Exempt-Narcotic registers have been kept up quite well. In a few instances some of them could stand improvement. In some cases pharmacists could be more careful in having poisons signed for in the Poison Register. I have checked with clerical personnel in some stores and have found out in our conversation that they had little or no instruction in the retailing of poisons. This is an item that pharmacists should be more careful about for public health protection and for their own personal liability. During the past year we have had some checks by Federal Inspectors on the signing out of Ethyl Rubbing Alcohol at the time of sale. This is a warning to those who have been lax in the past.

There is one thing that has been brought to my attention many times during the past year and this is the responsibility of the pharmacist who is in charge of a pharmacy in this state. When a pharmacist leaves a pharmacy and allows prescriptions to be filled by non-pharmacist personnel, he is guilty of a misdemeanor and is running the chance of losing his permit to practice pharmacy; he is also throwing away his profession as well as his fellow pharmacist who has worked hard to improve the profession of pharmacy. I bring this into my report for another reason and

that is because I have been criticized for writing up reports on violations of this type that I have just mentioned by some individuals who thought that I was wrong. I am sorry to have to write up such reports but whenever I find them in the future I will write up the violation as I see it and turn it in.

During the past year I have inspected and checked in four new pharmacies and have pre-inspected three additional new pharmacies which will be opened early next month. I have checked out nine pharmacies that have ceased to operate as a pharmacy during the past year.

I again want to thank the pharmacy managers for their wonderful cooperation in my inspection work. I am looking forward to another wonderful year and to seeing all of you again during the coming months.

Respectfully submitted,
Glenn E. Velau, Inspector
S. D. Board of Pharmacy

SCHOOL OF PHARMACY REPORT

Gentlemen:

The members of your School of Pharmacy Committee submit the following report for the 1956-57 year.

The average enrollment for the school year was 250 students which makes the Division of Pharmacy one of the largest colleges of pharmacy in the Northwest. Two hundred and fifty students are all that can be accommodated in the present quarters. It is evident that more space must be found so that the work of the Division can be

carried on in a satisfactory manner.

Fifty-one students received their Bachelor of Science degree in Pharmacy on Monday, June 3. This is the second largest graduating class in the history of the Division. The demand for graduates of the Division always exceeds the supply and this year proved no exception. There are many positions remaining unfilled. The 1958 class will be slightly larger than the class of this year and the 1959 class should number approximately sixty-five.

The Division has been very fortunate in that the Staff has remained stable. Three staff members received good offers of positions from other schools of pharmacy this year but elected to stay in South Dakota. Dr. Norval Webb received his Ph.D. degree in August 1956 from Purdue University and is now Associate Professor of Pharmacy. We consider the Staff of the Division above average and our hope is that it remains intact for years to come.

Every year well qualified needy students apply for scholarships. The Division is and always has been handicapped in that it has a very limited number of scholarships to offer. Your School of Pharmacy Committee knows that the Division would greatly appreciate more scholarship aid from the pharmacists of the State. Let's not forget about this matter when we return home and let's do something about it.

This past year Charles A. Locke of Brookings established a tuition scholarship

of \$108 in memory of his wife. The scholarship is to be known as the Alice Locke Scholarship and is to be awarded to a needy sophomore or junior pharmacy student. The recipient is to be selected by the faculty. The Committee wishes to thank Mr. Locke for the scholarship. The Committee also wishes to thank Mr. Griffin of the Lewis Drug of Sioux Falls for the two tuition scholarships they have established.

The Board of Pharmacy and our Association have for many years each given a tuition scholarship of \$84.00. Tuition has been raised to \$108 a year. We recommend that the scholarships be continued as tuition scholarships in the amount of \$108 each.

The Annual Refresher Course was held in the Union Building at State College on April 9 and 10. The attendance was average. The program was excellent and greatly enjoyed by all present. We recommend this Refresher Course and it is our hope that more of you will find it possible to attend in the future.

Even though the teaching load of the Staff of the Division is heavy, a considerable amount of research is being done and it is expected that more will be done in the future.

The members of your School of Pharmacy Committee feel that we should all be proud of the work being done by the Division of Pharmacy. It has the support of the College Administration, it is being well administered, its Staff is especially well qualified, and its

graduates are accepted everywhere as being well trained to practice the profession of pharmacy.

Two loans were made from the Student Loan Fund this year. A resume of the present status of the Loan Fund is as follows:

Loans	\$225.00
Cash on hand	
Checking account	467.23
Certificate of deposit	1,217.63
Total Assets	\$1,909.86

The interest received on the certificate of deposit last year amounted to \$29.70 which amount is included in the above assets.

Respectfully submitted,
Aloysius Ernster
Calvin Estwick
John F. Nelson, Chairman

BROOKINGS PLANS 1958 CONVENTION

The plans for the 1958 Convention of the South Dakota State Pharmaceutical Association were tentatively made at a recent meeting of the Brookings County Pharmaceutical Society. The tentative date for the 1958 convention is June 22-25, Sunday through Wednesday morning.

Appointed as Local Secretaries and General Co-Chairmen were J. C. Shirley, Shirley Drug, and G. C. Gross, Division of Pharmacy, South Dakota State College. Shirley is Treasurer of the South Dakota State Pharmaceutical Association and Gross is Professor and Head of the Department of Pharmacology at the college.

Committee assignments have also been made.

CONVENTION PICTURES*



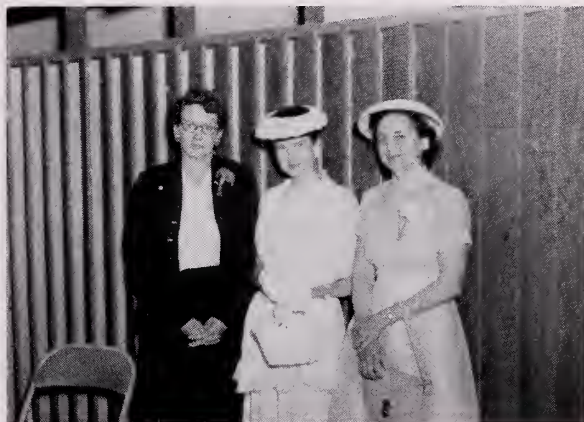
Caption #1

C. P. Perron, Pepsodent Division of Lever Brothers Co., presents plaque describing the Pepsodent Presidential Scholarship Program to Al Knutson.



Caption #2

Wells and Ken EerNisse



Caption #3

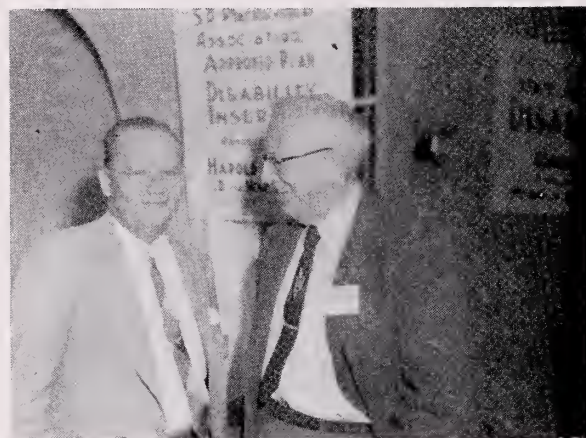
Officers of Ladies Auxiliary. L. to R.: Mrs. G. C. Gross, Brookings, Mrs. Willis Hodson, Aberdeen, and Mrs. Alger Knutson, Clark.

*Pictures through the courtesy of Miss Eleanor Bloom, Northwestern Druggist, St. Paul, Minnesota.



Caption #4

R. E. Trumm, Hayti, and Edward W. Peterson, Elk Point, veteran South Dakota pharmacists.



Caption #5

Floyd Cornwell, Webster, and John Sidle, Alexandria, veteran South Dakota pharmacists.



Caption #6

Officers of the State Association. L. to R. Standing — Vere Larsen, 1st Vice President, Alcester; Willis Hodson, 2nd Vice President, Aberdeen; Albert H. Zarecky, 3rd Vice President, Pierre; Philip E. Case, 4th Vice President, Parker. Sitting L. to R. — George Lehr, President, Rapid City; J. C. Shirley, Treasurer, Brookings.



Division of Pharmacy
South Dakota State College
Brookings, South Dakota

*for fun
and profit
for you*

meet in
MINNEAPOLIS
OCT. 6-14

N.A.R.D. CONVENTION

Come early . . . and stay late. Bring along your wife for the time of your life at the 59th Annual Convention of the National Association of Retail Druggists. Five fabulous nights of entertainment . . . prizes galore, and the greatest of all drug shows. By making advance registration now, you may be the lucky winner of \$100 in cash.

WIN \$100

send your registration
now—don't

miss the biggest and best

N.A.R.D. CONVENTION

CALL OR WRITE YOUR ASSOCIATION OFFICE



E. C. BOBB, M.D.
1912—1957

Dr. E. C. Bobb, 45, Mitchell physician and surgeon, died Wednesday September 4th at a private Minneapolis hospital after a lingering heart ailment.

Dr. Bobb, son of Dr. and Mrs. C. S. Bobb, had practiced in Mitchell for about 13 years. His father was a longtime Mitchell doctor until his retirement a few years ago. The younger Dr. Bobb was born and reared in Mitchell and went through its public schools.

He attended the University of South Dakota medical school and was a 1942 graduate of the Northwestern University school of medicine. He interned at the Denver (Colo.) General Hospital and entered practice in Mitchell following his internship.

He was associated with Dr. V.R. Vonburg.

Dr. Bobb is survived by his widow, Thelma; two sons, his parents; two sisters, Mrs. C. M. Hughes and Mrs. W. M. Missen, and a brother, Charles H. Bobb.

C. W. HARGENS, M.D.
1866—1957

Dr. C. W. Hargens, 91, resident of Hot Springs for 66 years, died Friday August 23rd at the Lutheran Hospital, funeral services were held Wednesday, August 28th at 2 p.m., at McColley Chapel of the Hills.

Dr. C. W. Hargens was born June 6, 1866 at Wigland, Ia. He was graduated from the Northwestern School of Medicine, Evanston, Ill., in 1890. He came to Hot Springs in January, 1891, where he hung out his shingle for more than half a century prior to his retirement about 12 years ago.

Dr. Hargens, with Sister Augusta, was instrumental in the founding of Our Lady of Lourdes hospital. Later he started his own private hospital and sanatorium on Evans Heights which he operated until 1918. He then started the Lutheran hospital which he operated until 1924, when he again returned to the Sisters' Hospital.

High honors came to Dr. Hargens during his many years of medical and surgical practice. He was made a member of the American College of Surgeons, was appointed consulting physician for Battle Mountain sanitarium, and later became consulting surgeon for that institution. Special tribute was paid him at a meeting held at the Mayo Clinic, Rochester, Minn., when he was elected president of the Northwestern Surgical Society, which post he held for more than 50 years.

Dr. Hargens, who at the time of his death, was the oldest practitioner in the Black Hills, was to have performed the first abdominal operation in the Black Hills. Known as the "horse and buggy doctor" for many years, he rode and drove to make calls throughout the Southern Hills, often going as far as Rapid City. Eventually he performed the first operation in the then brand new Our Lady of Lourdes hospital with all the modern devices known to the world at that time.

Dr. Hargens was married to Pearl Carley, who died in 1935.

Surviving are two sons, Charles Hargen, well-known artist, Doylestown, Pa.; and Holland G. Hargens, Custer State Park; five grandchildren and six great grandchildren.

HARRY R. HUMMER, M.D.**1878—1957**

Dr. Harry R. Hummer, 79, who was superintendent of the first and only mental asylum for Indians under the Federal Government, died at a Sioux Falls hospital Wednesday, August 28th following an illness of several months.

The body was taken to Washington, D. C. for a second service Sunday September 1. Interment will be in the Congressional Cemetery.

Dr. Hummer was born in Washington, D. C., on Jan. 27, 1878 and grew into manhood there. He was graduated from the Georgetown University in Washington, D. C., and was interned at the St. Elizabeth Hospital. Dr. Hummer served as junior and senior assistant at that hospital until 1908. During this time he received a degree in psychiatry.

He was married to Norena Guest, a cousin of poet Edgar Guest, on Jan. 5, 1901, in Washington. The couple moved to Canton in 1908 when Dr. Hummer became the superintendent and supply dispersing agent at the Asylum for Insane Indians there. He served in this capacity until 1932 when the asylum was closed.

Dr. Hummer, who was listed in Who's Who in America from 1928-1936, was a member of the South Dakota State and Sioux Valley Hospital Medical Association. He was also a member of the Memorial AM Psychiatric Association of America.

He came to Sioux Falls in 1940 and retired in 1952.

During his residence in Canton, the doctor was a member of the Commercial Club. He was a member of the Methodist Church. Dr. Hummer served as a major in the Army Medical Reserve during World War I.

He was a Mason, a member of the Sioux

Falls Consistory and the El Riad and sang with the Chanters for 20 years. He belonged to the Crusade Commandery in Canton and was a charter member and past president of this organization. In 1933 and 1934 he served as grand commander for South Dakota of that rite.

Survivors include his widow; two sons, Dr. Francis L. Hummer, Madison, Wis. and Rear Adm. Harry R. Hummer, Jr., San Diego; four grandchildren, four great grandchildren; a sister, Mrs. Henry A. Lepper, Silver Springs, Md., and a brother, John Hummer, Washington, D. C.

THOMAS P. RANNEY, M.D**1881—1957**

Dr. Thomas P. Ranney passed away on August 19, 1957, after a brief illness of Pneumonia and a complication of diseases. He was born in Grundy Center, Iowa on November 17, 1881. Dr. Ranney graduated from Northwestern University Medical School in 1905 and came to Aberdeen in 1918, where he practiced general medicine and surgery until he retired two years ago. At the meeting of the South Dakota State Medical Association in May 1955 he received his 50 year pin from the out-going president, Dr. A. W. Spiry.

He was a member of Nu Sigma Nu Medical Fraternity, Elks and Masons. He was a past president of the Aberdeen District Medical Society and the Medical Staff of St. Lukes Hospital. He served several terms as a member of the Board of Education of the Aberdeen City Schools and also served as an Elder and Trustee of the First Presbyterian Church of Aberdeen. Funeral services were held at the First Presbyterian Church with the Medical Profession and nurses from St. Lukes Hospital attending in a body, in addition to a host of friends and relatives.



TUBERCULOSIS AND THE PHYSICIAN IN GENERAL PRACTICE*

J. Arthur Myers, M.D.

The invitation to attend the Golden Jubilee Meeting of the Dakota State Medical Associations June 1 to 4, 1931 was a significant honor and an exceedingly pleasing occasion to be exceeded only by your invitation to attend this, your diamond anniversary. During the past 25 years we have entered the period which will probably always be referred to as the glory of twentieth century medicine. We have seen chemicals and antibiotics prove to be specific for one pathogenic microorganism after another. It is said that Sir Alexander Fleming's work and those who followed him has increased the span of human life by ten years.

We have seen the chest including the heart yield many of its secrets to the surgeon.

Before your Golden Jubilee Meeting I was asked to speak on "the relationship between tuberculosis in children and adults." Attention was called to the then well established fact that infected children rarely develop clinical pulmonary tuberculosis, but those who are infected and remain apparently well throughout the period of childhood stand considerable chance of developing clinical tuberculosis sometime during adulthood. Emphasis was also placed on the fact that many children even then were protected against tuberculous infection some of whom were destined to acquire their first infection in adulthood. It had already been shown that theorists clinging to the view that first in-

fections acquired in adulthood are much more serious than those which occur during childhood were in error since well documented evidence was available to show that the adult human body defends itself as well against initial invasions with tubercle bacilli as that of the child.

At the time of the Golden Anniversary Meeting fine methods of preventing the spread of tubercle bacilli were in progress and had been for some time. Each of the Dakotas had had for a number of years, in fact since 1911 and 1912, a sanatorium where many persons with contagious tuberculosis were isolated so their children and other associates were protected against infection.

Veterinarians had long been at work in an effort to eradicate tuberculosis from animals, particularly cattle. Many counties in these two states had already received a modified accredited rating, and all counties in North Dakota were so accredited by 1932 and in South Dakota by 1938. Thus, the populations of bovine type of tubercle bacilli had been so reduced that it was unusual for a person to become infected from an animal. This situation has improved until today periodic testing of cattle with tuberculin results in finding very few reactors. Indeed, there is considerable evidence that of the few cattle which do become infected annually more acquire tubercle bacilli from human associates than from other animals.

The control program among people and animals has been so effective that the vast

* Presented before the 75th anniversary meeting of Dakota medicine, Aberdeen, South Dakota, June 4 and 5, 1956.

majority of Dakota children and young adults have been protected against tubercle bacilli to such a degree that they do not react to tuberculin. However, among persons of 40 years and older, the incidence of tuberculous infection is much higher. When these older persons were children and young adults, almost nothing was done to protect them against either the human or bovine type of tubercle bacilli. Most persons who died from tuberculosis did so in their homes. Dairy products frequently contained living bovine type of tubercle bacilli. Thus, the children of those days, now the older persons, in considerable number are still harboring progeny of the tubercle bacilli acquired so early in life.

Your predecessors and many physicians working today, as well as veterinarians, participated in the program resulting in this fine accomplishment. Indeed, the disease has been so controlled that you have entered a new era which consists of making a major attack on the tubercle bacillus itself rather than just trying to repair the damage it has caused in human bodies.

While tuberculosis is every physician's problem, the large share of the work leading to eradication will need to be done by those in general practice because they constitute the majority of physicians, because they contact far more people than any other group of physicians and, therefore, have greater influence over the citizenry in promoting tuberculosis eradication projects.

Anachronisms now constitute the most serious handicap to the eradication of tuberculosis around the world. This term applies to teaching and practices originally based on theories and opinions which have long been in use but have been proved of little or no value. Indeed, anachronisms now in vogue are consuming time and energy of thousands of workers and costing huge sums of money without benefit to the tuberculosis eradication program. For example, much time and energy are wasted in arguments and controversies as to the different effects tubercle bacilli might have as they enter human bodies at different ages of life. Opinions, speculations and theories are rife, but well-documented evidence is lacking to show that age makes any difference whatsoever.

The literature abounds with statements to

the effect that people of different races and nationalities are more susceptible to infection and resist tubercle bacilli more poorly than others. For example, American Indians and Negroes have often been referred to as primitive races with little or no resistance to tubercle bacilli. At the opposite extreme, Jews are referred to as most resistant of all the peoples of the world. These erroneous deductions were derived from facts. For example, it was long observed that morbidity and mortality rates were exceedingly high among American Indians and Negroes but relatively low among Jews. Little or no consideration was given to differences in social, hygienic conditions and care provided for Indians and Negroes as contrasted with that among Jews, dating to the health measures taught by Moses. Wherever Indians and Negroes have had the same social conditions and the same health measures, they have resisted tubercle bacilli and responded to treatment in the same manner as their Caucasian brethren. There is no question about the facts being correct with reference to the destructiveness of the disease among Indians and Negroes, but the deductions were wrong with reference to cause.

This also applies to persons suffering from mental illness, who only a few decades ago were said to have high susceptibility and low resistance to tubercle bacilli because of the mental condition. Accurate observations, however, have shown that the high tuberculosis rates which obtain in institutions for the mentally ill were due to contagion which was permitted to exist rather than the mental illness.

The theory that initial tuberculous infection postponed to adulthood is a much more serious condition than when acquired in childhood is no longer tenable.

The belief that clinical disease usually develops within two years after initial infection with tubercle bacilli was largely due to failure to differentiate primary pulmonary infiltrates from reinfection clinical type of disease. Longitudinal observations of persons first infected in childhood or adulthood have thoroughly disproved this concept. In fact, there is good evidence that most of the morbidity and mortality are now occurring in the United States and some other parts of the

world as the result of infections acquired long ago.

A belief is extant to the effect that most persons whose lesions reactivate or who have new ones appear do so within two years after apparently successful treatment. Here again, longitudinal observations have proved this belief to be a fallacy.

Even bitter controversies have been waged concerning portals of entry. One school has clung tenaciously to the belief that most pulmonary tuberculosis is the result of tubercle bacilli entering through the respiratory tract while another school speaks just as loudly for the digestive tract. Evidently the portal of entry makes no difference since it is well known that when tubercle bacilli are experimentally introduced directly into the intestines, subcutaneously, intracutaneously, intrapleurally, or the blood stream, they may soon be found in the lungs just as surely as when introduced directly into the respiratory tract. The point of importance is that they are allowed to enter the body by any portal.

Since Hippocrates' time, there has been a widely accepted belief that certain foods provide resistance against tubercle bacilli. Practically every food element has been employed singly or in combination with others, but throughout thousands of years no one has shown incontrovertibly that food beyond the daily requirement play a role in resisting tubercle bacilli. Moreover, persons with the best known nutrition become infected with tubercle bacilli when invaded by them.

The numerous attempts to build resistance to tubercle bacilli by introducing living or dead organisms have been unavailing. No one has yet proved indisputably that efficaciousness of the tubercle-bacilli-resisting mechanism with which each human body is endowed has been aided by special nutrition or administration of living or dead organisms.

The first project of the medical profession everywhere should consist of abandoning anachronisms and employing those methods that strike straight at the heart of tuberculosis, namely, the tubercle bacilli. The attack must be an offensive, not a defensive one.

There is no more important project for the medical profession than early case finding, whether it be in physicians' office, clinics, hospitals, surveys, or elsewhere, that affords

opportunity for examinations. The person who reacts characteristically to tuberculin has at least microscopical lesions harboring tubercle bacilli. Such lesions can be detected by the tuberculin reaction within three to seven weeks after invasion of tubercle bacilli occurs. Therefore, this is by far our earliest diagnostic method.

Although x-ray shadows of lesions are never pathognomonic, lesions which prove to be tuberculous occur only among persons who react to tuberculin. Chronic lesions which evolve in the lungs usually can be found by the shadows they cast long before symptoms or physical signs are present. Therefore, the x-ray film is not the method which detects tuberculosis earliest but is the method which detects evolving gross lesions earlier than any other procedure. Finding shadow-casting lesions in a tuberculin reactor necessitates bacteriological study and sometimes biopsy. The fact of great importance is that a tuberculin reactor in the absence of all other findings is a case of tuberculosis. The only difference between such an individual and one who is dying from the disease is one of evolution of lesions.

Another important project following the diagnosis is to provide for adequate treatment, which obviously depends upon the stage of the disease. The contagious case must immediately be isolated so as to prevent the spread of tubercle bacilli among persons, including hospital and sanatorium personnel. Technique is now available for this purpose.

The divergence between morbidity and mortality rates in most parts of the world since 1947 has resulted in confusing statements. This situation is not a mysterious phenomenon, but rather, one with a clear explanation. In places where offensive attacks on tubercle bacilli have been in progress for a few decades, the infection attack rate has been decreasing along with and parallel to morbidity and mortality rates. Since 1947, infection attack and morbidity rates have continued to decrease as previously. However, anti-tuberculosis drugs have at least postponed many deaths, and thus the mortality graph decreased rapidly. Hence, the divergence between morbidity and mortality rates. The faster the medical profession and its allies decrease the infection attack rate, the faster the morbidity rate will decline, as

these two phases of the disease run parallel courses.

A popular movement now under way consists of offering examination to persons of all ages in an entire community, county, or even larger area. This is a cooperative activity with the medical profession, local and state boards of health, and local and state tuberculosis and health associations. Physicians must make the examinations, boards of health serve as official agencies, and tuberculosis and health associations provide such phases as educational activities, procedures, etc.

Examination consists of first offering the tuberculin test to every citizen regardless of age. Reactors have chest x-ray film inspection, and those with shadow-casting lesions have complete examinations to determine etiology. Isolation and treatment are instituted when indicated. Extra-thoracic tuberculous lesions such as those of bones, joints, superficial lymph nodes, and kidneys must also be given consideration. Physicians who participate in such projects without immediate financial gain render a service to their communities which no other group of individuals can do. Moreover, tuberculosis is the problem of the physician and his family just as it is of everyone else in the community. Therefore, in demonstration projects the physician should give of his time as freely as is done by other citizens. This public service on the part of the medical profession increases the confidence of the citizenry. It impresses upon all the people the fact that local physicians are capable of doing modern tuberculosis work. Moreover, it squelches those who believe and teach that physicians are interested only in fees.

Such projects are not without precedent. Indeed, in 1941 the physicians of Meeker County, Minnesota, voted unanimously to conduct a county-wide tuberculosis control program without financial remuneration. They found that approximately 23 per cent of the citizens had at least microscopical lesions harboring tubercle bacilli. Moreover, they learned just where the tubercle bacilli of their county were located. Continuing with the examination of the tuberculin reactors, they found 16 persons in whom tuberculosis had evolved to such gross proportions as to be detectable by x-ray film inspection of the chest.

These physicians realized that among the tuberculin reactors whose x-ray films were clear at the moment some lesions would evolve to shadow-casting size. Therefore, all such reactors should subsequently be examined periodically. They also realized that some persons who did not react to tuberculin would subsequently become infected, and therefore, all nonreactors should be retested periodically. When the demonstration was over, work of physicians was no longer on a gratis basis, but the usual fees for administering tuberculin tests, making x-ray film inspection of the chest, etc., were charged. Since the demonstration proved to the citizenry that periodic examinations for tuberculosis are desirable, many more persons have been examined periodically by private physicians than would have reported to them had the survey not been conducted. Thus, the demonstration survey constituted a long step toward eradication of the tubercle bacilli in that county.

Subsequently, the citizenry of several counties and municipalities have conducted similar demonstrations with approximately the same results as reported for Meeker County. In Hastings, Minnesota, with a population of 6,200, 90 per cent responded. The tuberculin test was administered and read gratis by local physicians and x-ray films of reactors were exposed, developed and read at cost.

In St. Louis, Missouri, the Academy of General Practice adopted a tuberculin testing program in the schools in 1951 as a public service. To date, nearly 100,000 children have received this test. Examinations have been completed as indicated and sources of children's infections have been sought with success. This service has resulted in increased confidence of the public in the physicians in general practice.

It is not a question of whether physicians can afford this service gratis, but rather, that they cannot afford to overlook such an opportunity. It is an excellent way of securing and maintaining confidence, good will and support of citizens. These are the factors which are so needed in returning the proper part of the tuberculosis problem to the offices of physicians, particularly those in general practice. As this is accomplished, we should experience the most effective attack of all time upon the tubercle bacillus.

Veterinarians and their coworkers found that by providing counties with **official certificates** after meeting certain control qualifications, widespread interest and increased activity in eradication work was created. Accreditation of counties on the basis of accomplishments in tuberculosis control among humans has been demonstrated to be of great value by insuring participation of physicians as well as the entire citizenry in the tuberculosis eradication movement.

A project of proved value consists of preparing a **spot map** following a tuberculin testing survey, showing just where tuberculin reactors have been found. Such a map was produced in a county of so-called low tuberculosis incidence. In fact, only one person died from tuberculosis in that county the previous year, and only three clinical cases were reported. However, this map reveals that 2,100 persons, mostly elderly people, are harboring tubercle bacilli, each one of whom is a potential case of clinical tuberculosis. If cognizance is not taken of this problem and clinical cases are not found as they evolve among the tuberculin reactors, they can soon disseminate enough tubercle bacilli to create a tuberculosis problem as serious as when the 20th century began.

The Committee on Tuberculosis of the American School Health Association devised a plan whereby individual or whole systems of schools are officially **certified** on the basis of tuberculosis control work in progress. In order to be awarded a first-class certificate, at least 95 per cent of the children from kindergarten through high school and 100 per cent of the personnel must be tested with tuberculin. All adult reactors, including high-school students and personnel, must have chest x-ray film inspection, and those with shadow-casting lesions completely examined. When these qualifications are met, the official certificate is issued by the American School Health Association and the local or state Tuberculosis and Health Association.

This project has been adopted in both North and South Dakota. The South Dakota subcommittee of the Committee on Tuberculosis of the American School Health Association consists of

R. G. Mayer, M.D., chairman 22½ S. Main, Aberdeen

C. L. Behrens, M.D., Rapid City

H. Russell Brown, M.D., Watertown
Roscoe Dean, M.D., Wessington Springs
N. E. Wessman, M.D., Sioux Falls.

The North Dakota members are

Percy L. Owens, M.D., chairman, Bismarck Department of Health, Bismarck

Ellis Oster, M.D., Ellendale

J. H. Clark, M.D., Minot

Many schools have already been certified in these states and a vigorous program is in progress.

This project is in vogue in several other states, and thousands of certificates are displayed on the walls of schools. It spells the doom of the tuberculous bus driver, engineer, janitor, teacher, other employee and even high-school student from spreading tubercle bacilli to other personnel and students. The success of this program depends upon the co-operation of the local medical profession.

In most parts of this country mass chest x-ray surveys are not economically sound. In many places they are being abandoned and replaced by x-ray surveys of certain groups such as elderly persons, prisoners, inmates of institutions for the mentally ill and hospital admissions. It has already been shown that this is not good economy. The only sound and effective method consists of screening from an entire population or any special group those who now or latter are found to harbor tubercle bacilli by the tuberculin reaction and concentrate all subsequent effort on them.

A belief is extant to the effect that all gross clinical cases of tuberculosis that will occur could now be found if x-ray film inspection were made of everyone's chest. Unfortunately, the situation is not so simple. If the estimated 55,000,000 tuberculin reactors in this country promptly had chest x-ray film inspections, it is likely that only 1 per cent or less would present evidence of significant lesions. Sight is often lost of the fact that new clinical lesions evolve among reactors from year to year throughout the remainder of their lives regardless of their present ages. Little would be accomplished if only the relatively few reactors with present gross lesions were found and properly managed and the crop of clinical and contagious lesions which will evolve among the remaining 99 per cent is not harvested as it matures. This problem

can be solved only by periodical examinations throughout the lives of those who react to tuberculin but whose x-ray films of the chest are now clear.

THE GOAL

The ultimate goal is eradication of tubercle bacilli. Unless some method of destroying these organisms in avascular lesions is devised, their eradication will be accomplished only by keeping them corralled in the bodies of people who now possess them as long as these individuals live. Thus, if from this moment no more new infections occurred, eradication is as far away in point of time as the death of the last person now harboring tubercle bacilli. It is true in this country that the vast majority of tubercle bacilli have taken refuge in the bodies of older people who will die within the next few decades. With their passing there will remain the relatively few infected persons who are now younger but in whose bodies bacilli must be kept corralled for the remainder of their lives.

Infants infected today may remain in good health through long lives but still may become clinical and contagious cases of tuberculosis in senility from progeny of tubercle bacilli which invade their tissues today. Thus, if infants are infected now, the tuberculosis eradication goal is no nearer than it was when this century began.

Eradication of tubercle bacilli must apply to the three now known pathogenic types — human, bovine, and avian. Each of them produces clinical diseases in more than one species of animals and all cause such disease in people. It is of little avail to eradicate the human type with the others extant and vice versa. Therefore, it is important that the medical profession cooperate with the veterinary medical profession in the all-out eradication movement.

Although veterinarians and their allies are approaching the bovine tuberculosis eradication goal and have attained it in many places, they continue to tuberculin test the entire cattle population of this country periodically. A. G. Karlson, D.V.M., Mayo Foundation, says: "An animal that reacts positively to the tuberculin test is properly considered as a dangerous individual . . . in spite of the great

advances in control, there is a constant potential hazard as long as only a few infected animals exist." This statement is equally true of people.

We must agree with David T. Smith, Duke University, when he says that even in this country where so much has been accomplished, we have not even reached the half-way mark in our eradication program. The more difficult and laborious work remains to be done. Any professional or lay organization that sets eradication as its goal and is willing to do the necessary work will have plenty to do throughout the lifetime of every person now engaged in the work. Much will remain to be done by our successors.

Just as we strove through the decades of this century to drive downward the mortality rate from nearly 200 and the morbidity rate from 2,000 per 100,000, we must now strive to drive downward the case rate of approximately 30,000 per 100,000 population. Our future success must be measured in reductions of this real case rate, and the goal will not be reached in any community or state until there is no case of tuberculosis manifested by the tuberculin reaction.

There is no shortcut to the tuberculosis eradication goal. Every person who is now infected must be examined periodically as long as he lives. This applies to all who henceforth become infected. Many persons now harboring tubercle bacilli will be living when the 21st century opens. Therefore, if all infections were stopped today, the disease could not possibly be eradicated during this century. However, if all persons now infected were kept under adequate observation, the eradication goal could be within shouting distance when the 21st century begins.

We must gird for a long, strenuous fight. Just as "a walking journey of a thousand miles begins with a single step," our long journey begins with promptly putting into operation all that we know about tuberculosis and diligently pursuing the tubercle bacillus to its last member.

SUPPLEMENTARY ROSTER

R. J. Quinn, M.D. _____ Coral Gables, Fla.
Supplementary list for 50 year members
F. S. Howe, M.D. _____ Deadwood, S. D.

ECONOMICS



THE DOCTOR AS A WITNESS*

George A. Bangs
Attorney-at-Law
Rapid City, S. D.

I.

THE DUTY OF THE CITIZEN TO GIVE TESTIMONY AS A WITNESS

Our modern system of determining disputed issues of facts, by the use of jurors and witnesses, is the product of a long evolutionary process, having its roots far back in Anglo-Saxon history. During medieval times and up to about the 15th century, witnesses were practically unknown in jury trials. You will recall that disputes were settled and the guilt of accused persons was determined by means which seem, to us, barbaric, to say the least. Trial by fire, trial by water, and trial by physical combat, all had their place as the means of determining disputed facts for the purpose of administering justice. As it first evolved, the jury had a dual function. The body was expected to utilize its own knowledge of facts surrounding the controversy and to unearth, by its own investigation, whatever evidence might be necessary to reach its determination. The dangers and hazards inherent in such a system are so apparent as to require no exposition. It is, however, interesting to note that this same outmoded, barbaric, and unfair method of trial has, within our own experience, been revived in the administrative branches of our government. Con-

sequently, the struggle must always go on to prevent the same man, or group of men, from being prosecutors, witnesses, judges, and jurors, all in the same proceeding.

As the concept of the separations of the functions of jurors and witnesses gradually evolved, the witness as such, was not looked upon with favor. He was considered to be a partisan, an ally of the party in whose behalf he spoke; and was frequently subjected to suit by the adverse party, who had suffered by reasons of his testimony. The law then recognized a cause of action known as "maintenance," which could be brought by the litigant against an adverse witness who volunteered his testimony. Under such conditions, the proper administration of justice was impossible, and the genius of our English forbears sought to find a better means of ascertaining the truth.

It was then conceived that, if the law should command a witness to appear and testify, the witness would then be protected against a charge of maintenance and the process of fact finding would thereby be facilitated. Accordingly, in 1562, the statute of Elizabeth was passed by which a penalty was imposed, and a civil action created against anyone who refused to attend a trial and give testimony after service of process and tender of expenses. This was the first statutory recognition of the power of subpoena, upon which all modern litigation is dependent.

*Address given before the Medical-Legal Conference, sponsored by the Black Hills Bar Association and the Black Hills Medical Society, at Rapid City, South Dakota, May 11, 1957.

The writ of subpoena had been developed prior to this time by the Courts of Chancery, but the process had been unrecognized in the courts of law.

Subsequently, the right of a party accused of crime to compel the attendance of witnesses in his behalf was formally recognized and it has now become firmly imbedded in our modern concept of due process of law. Article VI of the Constitution of the United States provides specifically that in all criminal prosecutions, the accused shall enjoy the right to have compulsory process for obtaining witnesses in his favor. The same guarantee is found in Section 7 of Article VI of the South Dakota Constitution. With respect to civil actions, the statute of Elizabeth has been considerably expanded and codified and is perpetuated in South Dakota in Chapter 36.03 of the Code. This chapter provides for the issuance of subpoenas by clerks of court, judges, notaries public, justices of the peace, and certain other officers, including all attorneys at law. It provides, further, for the arrest and punishment for contempt of court of any person duly subpoenaed who fails to appear, refuses to be sworn, or refuses to answer proper questions.

Thus, there has developed, as an integral part of our system of administering justice, the right of litigants, both civil and criminal, to compel the attendance and testimony of persons have knowledge of facts pertinent to the case.

The power of subpoena is a solemn and important power. Through it, any person having knowledge pertinent to litigation may be compelled to attend a trial and give his testimony, under oath. This necessarily involves a two-fold imposition upon the witness. In the first place, it requires him to attend the trial, even though it involves a financial sacrifice, an interruption of his daily routine, and inconvenience to the conduct of his business or profession. In addition, and perhaps of more serious import, it invades the privacy of the witness by compelling him to disclose facts within his knowledge, even though such disclosure may render him subject to criticism, censure, even personal disgrace. This possible abuse of the power of subpoena has received considerable attention of recent years, by reason of the activities of certain investigating committees of the National

Congress. Any use of the subpoena power, solely for the purpose of exposing persons to public humiliation, or for the purpose of advancing the political fortunes of these possessing the power, constitutes a threat to the existence of the subpoena power and should be resisted by all liberty-loving people.

In recognition of the fact that attendance as court requires personal expenditures on behalf of the witness, as well as being an imposition upon his time, there has arisen the doctrine that fees and expenses of the witness must be tendered with the subpoena, if demanded. The South Dakota statute on the subject is Section 36.0401, reading in part:

"A witness may demand his traveling fees and fee for one day's attendance when subpoena is served upon him, and if the same be not paid, the witness shall not be obliged to obey the subpoena."

Such fees are in the munificent sum of \$4 per day plus 15 cents for each mile actually traveled, one way.

The matter of witness fees becomes of some import to physicians who are, by the nature of their profession, called upon somewhat more frequently than the ordinary citizen for testimony, and whose means of livelihood is more intimately connection with their testimony than is ordinarily the case.

Let us, therefore, proceed to some consideration of the matter of compensation for the expert witness.

II

THE EXPERT WITNESS

The line of distinction between the expert witness and an ordinary witness is a fine line, sometimes indistinguishable. It is one which can be properly drawn only by reference to what Professor Wigmore terms the "experiential capacity of the witness." For example, if I see a man struck by a motor car, and immediately thereafter I perceive the shattered fragments of bone protruding from his forearm, I am perfectly capable of testifying, with reasonable accuracy, that the man suffered a broken arm. If however, his injuries include a crushed vertebra, which can be demonstrated only through X-ray examination, I am lacking in the training, skill, and knowledge necessary to perceive that fact, and in order to demonstrate adequately the evidence of that injury, it will be necessary to call as a witness someone trained in the

science and art of X-ray diagnosis.

So, in general, it may be said that an ordinary witness, or non-expert, is one who is qualified by his everyday experience to testify concerning his observations and the ordinary inferences proceeding from those observations. An expert witness, on the other hand, is one who has special training, skill, knowledge, and experience along a particular line which enables him to observe a particular set of facts and to draw inferences from such observations which are not available without his special skill, training, knowledge, and experience. In most instances, therefore, as medical men you are likely to be called as expert, rather than as non-expert, witnesses. In court-room procedure, the ordinary witness is presumed to be qualified to give testimony concerning ordinary matters, while the "expert" witness must have his qualifications favorably passed by the judge before venturing into the more esoteric realm of opinion evidence.

This, in turn, brings us to the crux of our discussion; namely, the nature of the rights and the duties of a physician whose testimony is desired in connection with civil litigation.

III

THE DUTY OF THE PHYSICIAN TO TESTIFY

The physician who has knowledge of the physical condition of a litigant, when such physical condition is an issue in litigation, is under the same identical duty to testify if called upon as in any other witness having knowledge of pertinent facts. He is technically and legally under the duty to make his testimony available, if subpoenaed, for the same \$4 per day provided for any other witness. I appreciate that these words seem blunt and harsh, and that they are perhaps at odds with some of your preconceived notions concerning the rights and privileges of expert witnesses in general, and physicians in particular. Let us, therefore, divide the subject into its two component parts and consider them separately.

First, as to the duty to testify, there can be no serious dispute. There is no doubt that the physician's time is valuable, but so is the time of every witness, every juror, every citizen. I can think of no better illustration of my point than the words of the distinguished English philosopher, economist, and lawyer,

Mr. Jeremy Bentham, who more than a century ago analyzed the duty to testify in these words:

"What then- Are men of first rank and consideration, are men high in office, men whose time is not less valuable to the public than to themselves, — are such men to be forced to quit their business, their functions, and who is more than all, their pleasure, at the beck of every idle or malicious adversary, to dance attendance upon every petty cause? Yes, as far as it is necessary, — they and everybody. Upon business of other people's, everybody is obliged to attend, and nobody complains of it. Were the Prince of Wales, the Archbishop of Canterbury, and the Lord High Chancellor, to be passing by in the same coach while a chimney-sweeper and a barrow-woman were in dispute about a half penny worth of apples, and the chimney-sweeper or the barrow-woman were to think proper to call upon them for their evidence, could they refuse it? No, most certainly."

The law has seen fit to confer upon you as physicians an absolute right of exemption from jury duty because of your calling and your importance to your community. You should bear in mind that other less favored citizens are called upon to give day after day of their time to jury service for a pittance of \$5 per day, regardless of the economic hardship which this may bring to them or their families. But no similar exemption from the duty to testify has been, or can be, conferred upon you. It is a solemn obligation of citizenship which you owe to the organized society upon which all of us are dependent for our way of life. In the words of Chief Justice Caton of Illinois:

"What right have the courts to compel anyone to quit his own affairs, no matter how pressing they may be, and attend as a witness or juror in litigation between strangers? This duty to assist others who stand in need of our assistance with the maintenance of our rights necessarily flows from the relationship we bear each other as members of the same community, we being mutually dependent upon each other for security and protection."

There was a time in the development of English law when it was considered that an expert witness, called upon to give opinion testimony as distinguished from factual testimony, was not subject to subpoena and

could not be compelled to testify unless he were appropriately compensated. This view has fallen more and more into disfavor for the obvious reason that it tended to make a man's fundamental rights subject to his ability to pay professional fees for witnesses to help him sustain his rights. Professor Wigmore, the greatest of all American authorities on the subject of legal evidence, not only concludes that the expert witness is not entitled to demand professional fees before testifying, but goes so far as to oppose on principle the requirement of tendering any witness his nominal per diem in order to effectuate a subpoena. He says of this ancient custom:

"Its defect is, in the first place, that it tends to create a false impression that the witness' duties are to the party and not to the community, and that he is rendering his services for money to the party that desires them. It tends to intensify the unwholesome partisan spirit of witnesses and to put them in the position of paid retainers. It lowers the moral level of litigation."

One of the recent expositions of the duty of a physician to testify, without special compensation, arose in 1951 before the Supreme Court of California. The city of San Francisco, having been sued for personal injuries, sought to obtain the testimony on deposition of one Dr. Joseph Catton, a specialist in nervous and mental diseases, who had examined the plaintiff. Dr. Catton refused to give testimony on the grounds that his knowledge and opinions were the result of his special training, and that he refused to be deprived of them without payment of his professional fee. The court concluded: "He is like any other witness with knowledge of such facts; it is immaterial that he discovered them by reason of his special training. In testifying as a witness, he would simply be imparting information relevant to the issue, as he would had he been a witness to the accident in which plaintiff was injured. A physician who has acquired knowledge of a patient or of special facts in connection with a patient may be called upon to testify to those facts without any compensation other than the ordinary witness receives for attendance upon court."

This matter has received the attention of the South Dakota Supreme Court in the case

of *Brown County v. Hall*, decided in 1933. The expert witness in this case was an accountant rather than a physician, but the principle involved is identical. In disposing of the matter, the Court stated:

"The process of the courts may always be invoked to require witnesses to appear and testify to facts within their knowledge when relevant to the issues pending for determination. This applies to the expert witness. He may be required to testify to such matters that are within his knowledge, though he may have gained a special knowledge thereof by reason of professional learning, experience, or skill, and is not entitled to demand extra compensation for testifying thereto."

The court goes on to state, however, that an expert may not be compelled by ordinary subpoena to specifically equip himself by special research or investigation to testify either to an opinion or to any other fact that might be ascertained by special services.

The rule, therefore, seems to be clear and well defined. A physician cannot be compelled to examine a patient so as to be prepared to testify, but having conducted such an examination and having thereby placed himself in possession of facts and professional opinions relevant to the issue, he can thereafter be compelled upon the tender of ordinary witness' fees be forced to attend and testify at the behest of either party.

This legal principle gives rise to a situation which is of utmost concern to both our professions. As lawyers, we need the testimony of physicians frequently in order to secure for our clients their rights. We have no desire to victimize members of the medical profession by making undue demands upon their time and talent without proper compensation. After all, we are as vitally interested as you in the establishment and maintenance of appropriate standards of professional compensation. On the other hand, we have a duty to our clients to see that they are not called upon to bear a disproportionate financial burden which may belong properly to the adverse party or to society at large. Let me illustrate: Let us suppose that I am engaged to defend a personal injury lawsuit on behalf of an insurance company. The situation is not unusual; in fact, it provides the bulk of jury practice. My engagement as counsel for a solvent client might be termed unusual,

but it does not affect the principle involved. And the hypothesis makes it easier for me to speak in the first person. I approach Dr. X and request of him that he examine the plaintiff; first, for the purpose of enabling me to advise my client whether or not settlement should be made, and if so, in what amount; second, for the purpose of testifying at the trial, if a trial should become necessary. It is perfectly proper that I should assure Dr. X that his fee for the examination will be paid, and indeed, the good doctor is entitled to expect me to do everything reasonably possible to assure payment for his services. To stay within the strict letter of the law, however, our contract should be solely for an examination fee; and if his appearance at the trial is necessary, he should receive \$4 per day plus mileage. To me this is unrealistic, and I believe our professions should join hands in seeking to change that rule of law so that the contract can encompass a reasonable charge for the time spent in court. The alternative, as a practical matter, is that the doctor in self-protection will charge an excessive examination fee so as to obtain compensation for the time he may be required to spend in court. I cannot condemn the doctor for this because, in his position, I believe I would do the same thing. The party requiring his service is well able to pay for them, and there is no logical reason, under the circumstances, that the doctor should suffer financial loss. The rule of law, however, seems to be that any contract to pay more than the ordinary witness fees for time spent in court is without adequate consideration and therefore, unenforceable.

My adversary in this case, having learned of my employment of Dr. X desires to take the doctor's testimony by deposition in advance of trial so that he may be prepared to meet such testimony. He serves a subpoena on the doctor accompanied by \$4 witness fees and 30 cents mileage and requires the doctor to be in attendance at the specified time and place. It now becomes the solemn duty of the doctor to appear and testify without further fee, because after all, the adversary is under no moral obligation; he looks upon the doctor as a member of the adverse team, and it is his duty to his client to take the deposition and be prepared to meet it. It is certainly not his duty to his client to proffer any fee in addition to that required by law. This may

strike you as a hardship upon the doctor, and it undoubtedly is. It is, however, a hardship shared by every witness in every lawsuit. Should this situation arise in your practice as physicians, we ask that you view the position of the adverse lawyer with tolerance and understanding; that you appreciate his duty to his client and the necessity for his inconveniencing you. If he is a reputable lawyer, he is not doing it to vex or deliberately inconvenience you; and he will undoubtedly, at your request, set the deposition at some time least inconvenient to you. If this occurs, please bear in mind that you are not the only segment of society called upon to sacrifice your time and talent in the interest of the administration of justice. Bear in mind, if you will, that the jurors who sit on the case will do so at \$5 per day and may suffer serious economic hardship as a result. Bear in mind, if you will, that the judge who sits on that case receives a salary considerably below the average compensation of lawyers in private practice throughout the country. Bear in mind, if you will, that the very lawyer who inconvenienced you, may at any time be appointed by the same judge to defend an indigent person accused of crime for a total fee of \$50, although the time and effort necessary to the defense may be worth many hundreds and even thousands of dollars.

An even more troublesome situation may well arise in the instance where I, as an attorney, undertake to represent a plaintiff in a personal injury matter who is of extremely limited means. Ordinarily, such an engagement would be upon a contingent fee basis, with my compensation entirely dependent upon the outcome of the case. A very vexing question then arises as to the proper arrangement to be made with a physician whose medical testimony is necessary or important. For me to pay his fee without expectation of reimbursement would be wrong on at least three counts. In the first place, it would impose a financial burden upon me, which I am ill equipped to carry. In the second place, it would be illegal; and in the third place, it would be unprofessional; it might well subject me to disbarment. Of course, if the lawsuit is successful, I will probably be in a position to insure payment of the doctor's fee with the proceeds. However, the doctor's fee cannot legally or properly be made contin-

gent upon success of the suit for the courts almost universally declare such arrangement to be illegal, contrary to public policy, and void. In fact, there is record of at least one instance in New York state in which disbarment proceedings have been brought against an attorney for agreeing to share his contingent fee with a medical witness. The only available answer to this dilemma at present is for the physician to determine for himself whether or not he is willing to accept the engagement under the circumstances.

In this area where inter-professional co-operation and understanding are of such vital importance, not only to the professions but to society at large, we need to work more closely together, each with a greater tolerance and understanding of the problems of the other. We, as lawyers, must be careful not to abuse the power of the subpoena. It is possible, for example, for a lawyer to require the attendance of a physician witness at the opening of court each day during a protracted lawsuit.

This would be, at the least, ungentlemanly and inconsiderate; at the most, unprofessional; but it would be legal and would cause the physician great inconvenience. Because we do not abuse subpoena power, because to the contrary we frequently inconvenience and disarrange our own conduct of litigation in order to place you on the stand out of order so as to take the least possible time away from your office or hospital, we feel that we have the right to ask that you should not be unreasonable, arbitrary, or demanding in your request for special consideration as a witness. Our concern for your convenience and that of your patient must be tempered by our duty to our clients to conduct the litigation in an orderly manner.

As I have stated I believe that great room for improvement exists in the matter of rules for the compensation of expert witnesses, and that our two professions should work together towards that end to the benefit of the public in general.



Protection against loss of income from accident & sickness as well as hospital expense benefits for you and all your eligible dependents.



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ASSOCIATIONS**
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**Wanted—General Practitioner
for Lamberton, population 1,200,
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Practice unopposed; nothing to buy; free use of community-owned general and diagnostic equipment in eight-room, first-floor office; also patients charts and records of large active practice for nine years. Nearest hospital (new) 15 miles; nearest M.D. 10 miles. Leaving to specialize; will continue practice until replaced. Large modern rambler home available. Contact Dr. Morton Roan or T. E. Kuehl, Banker, Lamberton, Minnesota.

SOUTH DAKOTA JOINT COMMISSION FOR THE IMPROVEMENT OF THE CARE OF THE PATIENT

(Editor's Note:) The Joint Commission of Medical, hospital and nursing groups was started several years ago and meets regularly to discuss problems of patient care. Its minutes will be published for the use of physicians and hospital administrators. Comments on the actions of the Commission are invited.

The sixth meeting of the South Dakota Joint Commission for the Improvement of the Care of the Patient was held in the Dining Room of the Mezzanine floor of the Marvin Hughitt Hotel, Huron, on Wednesday, September 18, 1957, at 1:00 P.M. Eighteen members were present: five members of the South Dakota Medical Association; five members of the South Dakota State Hospital Association; two members from the South Dakota State Nurses Association, three members from the South Dakota League for Nursing and three guests.

The Secretary, Sister M. Heliodore, read the minutes of the last meeting and they were approved as read.

Dr. David Buchanan, Chairman, read the term expiration for the two members of the South Dakota Medical Association — Dr. R. Delaney and Dr. M. E. Sanders. John C. Fotser announced that the two members were re-elected by the Board of the South Dakota Medical Association to remain another term of one year. Term expires for 1957 for the two members of the South Dakota Hospital Association: Edna Davidson, and Horace Atkins. For the South Dakota State Nurses Association: Kay McKillop. For the South Dakota League for Nursing: Sister Mary Aloysius Ann. Miss Veronica Goebel, Aberdeen, has been appointed a representative of the South Dakota League for Nursing to the S.D.J.C.I.C.P. for a term of one year.

OLD BUSINESS:

Report of the Secretary:

1. Minutes and Recommendations were mimeographed and sent to all parent organizations.
2. Expenses for postage, mimeographing, material and clerical help from April,

1957 to September, 1957, were \$7.19. The expenses were pro-rated to the parent organizations. Unpaid bill to the past Chairman and Secretary from 1952-1955 amounting to \$17.38 as pro-rated to South Dakota League for Nursing.

3. Copies of recommendations in a form of a check list as prepared by the Program Committee were mimeographed and sent to hospitals having a capacity for 40 beds or over. Seventeen hospitals responded to the recommendations with additional remarks.

The Chairman, Dr. David Buchanan read the report from the tabulations and a lively discussion followed.

Recommendations:

1. That In-Service Program be geared to the needs of all the workers in the hospital.

Report—9 yes

2 like more in-service

Remaining did not remark or felt it was not necessary.

No discussion followed.

2. That more emphasis be placed on meeting the needs of geriatric and alcoholic patients in the Nursing School Curriculum.

Report—8 hospitals remarked yes

1 was none-teaching

1 hospital has ten hours of teaching on the needs of these patients and attend the Alcoholic Anonymous meeting.

Remaining hospitals — no reply

Miss A. Thompson inquired whether there is an Alcoholic Anonymous group in every town. It was felt by the members that each town should have at least a small organized group to help the Alcoholics.

Miss McKillop suggested that a representative from the Alcoholic Anonymous be called upon to give In-Service Program to

the members of the hospital to acquaint them with their organization.

Miss A. Thompson felt that supervisors and head nurses attend the Alcoholic Anonymous meetings in order to gain knowledge and understanding of the Alcoholic Anonymous Group.

Mr. Jack Rogers expressed his concern about admitting Alcoholics to the general hospital. He reported that a ruling is in their hospital that upon admission of an alcoholic patient one member of the family is asked to stay with the patient. The problem of Special Duty Nurses arises when the family is unable to stay. Special duty Nurses refuse to take the case. Consequently, attendants render this service and receive the same pay. Misconception among the nursing team was raised as to the pay and yet it was felt that the patient must be cared for.

A lively discussion followed. Miss Hubbs suggested that the members of the Alcoholic Anonymous are very willing to stay with a patient on a rotation basis. Sister M. Rosaria has this system incorporated at the Sacred Heart Hospital and the results are gratifying with the full cooperation from the A.A. Group.

Mr. J. Foster asked Miss A. Thompson that a letter be sent to the Sioux Falls Registry for the required permission that attendants care for the alcoholic patient when nurses are not available from the registry.

3. That in order to insure better patient care, communications among the nursing team and other hospital personnel be improved.

Mr. Rugers made mention that the Theme of the Annual Meeting of Hospital Association will be "How is Your Communications" given by Dr. Wilson. No further discussion ensued.

4. That a Committee be appointed to compile a booklet containing the "why's" of procedures in simple, interesting language for patient.

Report—4 hospitals have some form of a booklet or an instructional sheet. Remaining hospitals remarked they are working on some form to incorporate in their hospital. No comments.

Mr. Atkins asked Sr. M. Rosaria for sample

copies of instruction sheets.

5. That Hospital Administrators, Board of Directors and Doctors be encouraged to work with Administrators and Faculty of Schools of Nursing to prepare for National Accreditation.

Report—10 hospitals reported they are seeking their National Accreditation

1 is accredited

Remaining none-teaching

Dr. David Buchanan raised the question "What measures are used for Accreditation?" Sister M. Rosaria whose Nursing School won full accreditation in 1957 mentioned that there must be full cooperation among all of the members of the hospital. Sister recommended that the Advisory Committee and other groups be well versed as to what accreditation is and what it entails.

6. That some methods of follow-up be instituted whereby the patients will be contacted after discharge. If a home visit is not feasible, a letter might be used.

Report—4 hospitals have some form of letter or a questionnaire for a follow-up

1 hospital made mention that the social worker should take over the follow-up.

Remaining hospitals are working on a follow-up.

A discussion followed. It was suggested that the follow-up letter should be in a form of a personal letter to improve public relations.

Miss McKillop stated that they have two simple form letters to follow-up, e.g.: How are you getting along? Have you any suggestions to make to improve facilities and care of the patient in the hospital?

A discussion followed that if suggestions are made by the patient these should be re-evaluated and corresponding corrections made.

Dr. David Buchanan felt that if a follow-up is done by the hospital personnel, the Doctor in care of the patient should be contacted when the letter is sent out.

The problem of Interpersonal Relationship was raised by Dr. Vogele. He felt that there was more Interpersonal Relationship in small Community hospitals. Jack Rogers suggested that Doctors should help in developing Inter-

personal Relationship with the patients. It was suggested that office personnel should be of a very congenial type.

Mr. J. Foster suggested that an In-service Education should be given to all office personnel for at least one week prior to working. It is not the matter of paying them but the training is essential to help them to develop good Interpersonal Relationship traits.

A discussion followed and it was suggested that patients acutely ill should be taken directly to the assigned room and the office secretary take the history in the patients room.

Sr. M. Rosaria suggested that if a patient comes from the clinic or the office of the doctor a carbon pre-admission blank be used to be sent with the patient stating the diagnosis.

Jack Rogers informed the group that the "Hostess Type" of admission may prove of benefit to the hospital. The first question the hostess may ask is "Are you feeling well enough to answer questions, or do you wish to go first to your room?" These hostesses are on the secretarial level. The problem of having courteous people at the switchboard was discussed.

Miss A. Thompson suggested that a skit could enlighten the personnel on good Interpersonal Relations.

7. That general duty nurses be given more opportunity to attend workshops institutes and meetings to assure better patient care.

Report—7 hospitals replied in the affirmative

- 1 hospital felt that there should be more workshops in the state.

Remaining felt they need replacements for nurses going to workshops.

Miss Hubbs suggested that office-nurses be encouraged to attend meetings. It was felt by Miss V. Goebel that they take very little interest in workshops or meetings, regardless of the day of the week and time they are scheduled.

Miss McKillop asked that all Doctors help by encouraging office-nurses to become members of the S.D.A.N.A.

Mr. J. Foster suggested that some form of information be made available about workshops and nursing meetings. A lively discus-

sion followed that if workshops improve the nurses knowledge, the doctors on the whole are willing to send their nurses, but 100% of nurses cannot be sent at one time, for one must also think of the service to be given to patient.

It was suggested by Dr. David Buchanan that at least ten minutes of the State Medical Association meeting be devoted to encouraging Doctors to help nurses join their Organization. Miss A. Thompson read the tentative program for the Annual Meeting of the S.D.A.N.A.

Mr. Jack Rogers felt that nurses leaving for a workshop should be paid by the hospital or the office Doctor. Nurses are to be given a day off and paid for the day's work if they are attending a meeting.

8. That the finding of subcommittees of the Interdivisional Committee be used as a basis for future planning for the improvement of patient care.

Report—4 hospitals reported they have a local joint Commission for the Improvement of the Care of the Patient.

Remaining—no remarks.

Sister M. Innocentia stated that every department in the hospital should be represented at the meeting to insure better care of the patient.

Mr. J. Foster felt that since the Joint Commission for the Improvement of the Care of the Patient is to stimulate, implement, assist in and sponsor activities which will contribute to the care of the patient, other department heads e.g.: Administrators, Medical Record Librarians, Dietitians, Laboratory Technicians, etc. be represented at the meetings.

Sr. M. Rose Marie suggested that all hospital administrators receive the minutes.

Sr. M. Rosaria moved that the minutes be typed and sent to the Journal "South Dakota Journal of Medicine and Pharmacy" and to the "South Dakota Nurse" for publication. Seconded by Miss McKillop. Carried.

All hospital Administrators should be notified by a newsletter of the publication in the Journal.

Mr. Jack Rogers moved that a Committee be appointed to study and select representatives from other organizations such as the Dietetic Association, Anesthetists Association, etc. Seconded by Sr. M. Rosaria.

COMMITTEE TO STUDY REPRESENTATIVES:

Jack Rogers, Chairman
Dr. Muggley
Sr. M. Rosaria

9. That a study be made relative to the signing of child surgical permit, which has caused traumatic effects on the parents and to determine if there might be other ways of carrying out this procedure.

Report—4 hospitals replied in the affirmative

1 hospital felt it was a legal matter

1 hospital remarked it was done at the main office

Remaining no remarks

Dr. Muggley raised the question of a blanket consent for surgery and treatment. Dr. Vogege felt the blanket consent be signed at the Doctor's office where the parents may receive the direct information about the surgery or the treatments. Sr. M. Rosaria reported that the Blanket Consent is at present in the hands of the lawyer. Dr. Vogege suggested that one of the larger hospitals study the problem of giving any hypo's to children in the treatment room rather than in bed. He felt the bed is the child's security and not a place of treatment.

The question about the safety of side rails was raised. Dr. David Buchanan stated that they are a safety for a patient that rolls in bed but not for one that is confused.

10. That total care of the patients be our primary interest rather than routine care that hospitals always felt was essential. That the nurse must understand the patient mentally, physically and spiritually in order to assist in his regaining health.

No comment.

11. That some large hospital be encouraged to act as a pilot in setting up a Room for the critically ill equivalent to the present Recovery Room in order to determine its merit.

Sr. M. Rosaria reported that Sacred Heart Hospital is at present working on one area of the hospital for the critically ill patients and will be used also for teaching purposes for the nursing students. Sister felt that the name "Critically Ill" be changed to "Con-

centrated Medical Ward." It was discussed that a unit set-up in a hospital for the critically ill patient will facilitate better nursing care. To insure good nursing care, full cooperation of the nursing team is essential.

PROGRAM COMMITTEE:

New Chairman: S. M. Innocentia,
Dr. Vogege, Mr. Corrigan

Sister M. Rose Marie, Chairman of the Program Committee suggested that hospitals in the State of South Dakota report on the Turnover in the hospitals for the next meeting.

The question "How to conserve the nurse's time was discussed. Sr. M. Rosaria suggested that everything should be packeted for the patients' admission chart.

Mr. J. Foster felt that all hospitals study the recommendations on the Labor Turnover Rate and the Stability Rate.

A discussion followed that the Turnover is not due to pregnancy or moving out of town. It was felt that wages were not the only factor.

Sr. M. Rosaria found that aides and maids should be screened and advancement in their wages should be made as they prove to be competent for their job.

Sr. M. Innocentia moved that all hospitals in South Dakota receive a copy of the "Important Personnel Statistics" and a report be sent to the President of the Hospital Association for evaluation. This report is to be given at the Annual Meeting in October. Seconded by Sister M. Rosaria. Carried.

Mr. Schultz suggested that administrators identify their hospitals, their geographical position and bed capacity.

Mr. Jack Rogers extended a cordial invitation to the members of the J.C.I.C.P. to attend the Annual Hospital Meeting to be held at Sioux Falls, October 15-16.

Mr. H. Atkins moved that an assessment of \$10.00 from the South Dakota State Medical Association, \$10.00 from the South Dakota Hospital Association, \$5.00 from the South Dakota State Nurses Association \$5.00 from the South Dakota League for Nursing be collected to cover the expenses during the six months extending from October, 1957 thru March, 1958 of the Joint Commission for the

(Continued on Page 414)

STAFF CLINIC DRAWS 130 DOCTORS

The McKennan Hospital Medical Staff Clinic was held September 25th in the St. Mary's Auditorium.

A fast-moving, highly interesting program was presented with the following speakers and subjects being featured.

D. L. Ensberg, M.D. — "The Use of Scalene Node Biopsy in the Diagnosis of Chest Diseases"

E. F. Watson, M.D. — "Nephrotic Stage of Glomerulonephritis" — A Case Report

R. E. Nelson, M.D. — "Congenital Anomalies of the Chest"

W. R. Anderson, M.D., H. W. Farrell, M.D., C. W. Ihle, M.D. — "Problems and Management in Erythroblastosis"

J. W. Donahoe, M.D., E. W. Sanderson, M.D. — "Pulmonary Emphysema and Fibrosis with Chronic Cor Pulmonale in Sisters"

W. J. Hage, M.D., L. J. Pankow, M.D. — "Bleeding Esophageal Varices" — A Case Report

J. H. Hoskins, M.D. — "Aortography in Renal Disease"

L. M. King, M.D. — "Etiology and Treatment of Eczematous Dermatitis"

G. W. Smith, M.D. — "Intracranial Vascular Anomalies Simulating Stroke"

C. Magdsick, M.D. — "Some Considerations of Pre-anesthetic Medication"

W. L. Jones, M.D. — "Oral Therapy in Diabetes"

W. E. Donahoe, M.D. — "An Unknown Syndrome"

T. R. Anderson, M.D. — "Acute Focal Appendicitis"

J. B. Gregg, M.D. — "The Safest Method of Tonsillectomy Anesthesia"



THE ROLE OF THE DOCTOR IN BLUE SHIELD

Dr. Fred Sternagel, President of the Iowa State Medical Society, and Dr. James W. Colbert, Jr., St. Louis University's Dean of Medicine, have offered sound counsel on shaping the course of Blue Shield. Both agree that the future of these Plans depends upon the guidance the profession gives to their development.

On the President's Page in the Iowa Journal for June, Dr. Sternagel reminded his colleagues that Blue Shield must continue to shape its course in accordance with changing conditions and public demand so that the program would continue to serve as an effective means of budgeting the cost of medical care.

"Blue Shield's job," wrote Dr. Sternagel, "is not yet finished for the spectre of 'socialized medicine' still haunts us. We shall have to cooperate intelligently and unselfishly, if our Plan is to protect the dignity of individual enterprise. It is clear that this program cannot continue to maintain leadership in a competitive field unless we work more closely (with it) than ever before."

Meanwhile, in San Francisco, Dr. Colbert told an annual staff day audience at St. Mary's Hospital that "it is absolutely essential that the plans do not get out of the control of the medical profession; if they do, the profession and the welfare of the patient will both suffer."

The thoughts expressed by Drs. Sternagel and Colbert are to the point. They place in sharp perspective the fundamental principle on which Blue Shield Plans were organized and must continue to operate. And today, perhaps more than ever before, developments in the health prepayment field necessitate a dedication to the principle of physician control with renewed vigor.

What Dr. Sternagel and Dr. Colbert were saying is clearly and concisely the clue to Blue Shield progress. Their ideas are basic . . . for it is in fact the physician's leadership, guidance, and active participation that are fundamental to the principles and objectives Blue Shield Plans were organized to serve. It is obvious, therefore, that the degree to which the profession contributes to the development of Blue Shield is alone the factor determining the extent to which Blue Shield will **serve the profession and the public best.**

With its strong ties to the profession through local medical society sponsorship, Blue Shield Plans **can** fully serve both professional interests and the public's need for a satisfactory means to budget medical care costs. And over the years, active physician participation in the affairs of Blue Shield has been encouraged and earnestly sought for the reason that those who administer the Plans recognize that in matters of providing health care coverage, it is the physician's judgment, leadership, and counsel that must prevail. It is only under these conditions that health care coverage consistent with the values and traditions of American medicine can continue to flourish and serve the public fully.

OOPS!

The September issue contained a publisher's nightmare for which we are truly sorry. In the paper, "The Obstructed Tear Duct" by Drs. Becker and Gregg, pages 345 and 346 have been transposed as well as "figure 10" being inserted upside down.

Reprints of the corrected paper will be available from the publication office.

THE MONTH IN WASHINGTON

In the last few years interest has built up in the problems of the older people — how they are to get their bills paid, how to spend their time constructively, what chronic medical conditions are causing them the most trouble. Innumerable national and local conferences have searched for ways to make life more satisfying and healthy for people entering old age, and committees are at work on the problem in thousands of communities.

In this favorable climate, when every device that might help the older citizens is being examined, there is being revived a scheme that met with no success at all when first proposed more than six years ago.

It is a plan for government-paid hospitalization under the Old Age and Survivors' Insurance system.

Here is the argument that is made for it:

People in old age generally have less income than when they were younger, but at the same time they require more medical attention and hospital care. Neither voluntary nor commercial health insurance has been able to offer these people the protection they need. The only solution, sponsors of the plan say, is to get the federal government into the picture.

Opponents of the idea agree that older people are sick more often and generally don't have much money, but they disagree violently with the other arguments. They point out that slowly but surely insurance coverage is being extended to older people at a price they can afford to pay. Most important, hospitalization-at-65 critics maintain that a system like this is in effect national compulsory health insurance under Social Security.

Early this year Reps. Emanuel Celler (D., N. Y.) and John Dingell (D., Mich.) introduced bills on this subject. They would allow 60 days a year free hospitalization for OASI-covered men 65 and over and women 62 and over. Rep. Kenneth A. Roberts (D., Ala.) offered a similar bill.

Just before the session ended two developments occurred that are evidence the proponents of this system of hospitalization are getting ready to make a real fight for it next year.

First, Rep. Aime J. Forand (D., R. I.) presented a bill that would make extensive lib-

eralization in the social security program, including creation of a hospitalization that would give free surgical service to the aged program. Some national labor leaders immediately pledged their support of this bill, a not unexpected move as the AFL-CIO is officially behind the general idea.

Then Senator Richard L. Neuberger (D., Oregon) made it plain he, too, wanted the old people to have free in-hospital medical care. The senator said he hadn't firmed up his thoughts, but that he believed the best approach would be something like the Military Dependent Medical Care program (Medicare), making use of Blue Cross or other nonprofit groups. He estimates that a 1% increase in payroll taxes for both employer and employee would meet the extra costs.

Mr. Forand, on the other hand, is specific. He would make all persons receiving OASI retirement benefits eligible and also surviving widows and children, but would not include persons receiving OASI disability payments. He would broaden the time period by allowing 120 days of hospital or nursing home care each year, with hospital stays limited to 60 days.

The Forand measure also has a provision, not contained in most earlier bills, for OASI also to pay for in-hospital surgical services certified as necessary by the physician.

Mr. Forand would take no chance of running out of money. He would levy social security payroll taxes on all income up to \$6,000 (present limit \$4,200), and also increase the tax rate a half cent for employer and employee alike, and three-quarters of one per cent for the self-employed.

It is almost certain that these and other similar suggestions will receive serious consideration by Congress next year, with passage of a bill much more likely than in 1951 when President Truman and Oscar Ewing first proposed the idea.

NOTES:

When Congress returns January 7, one of the measures waiting its attention will be a bill to control union welfare funds through registration and publicity. (Most funds involve medical-hospital benefits.)

(Continued on Page 414)

RESULTS OF QUESTIONNAIRE ON PHYSICIANS LIABILITY

This questionnaire was sent to 427 physicians on July 10, 1957.

Tabulation on September 11, 1957 showed that 351 questionnaires were returned. 82.2% return.

The Council of the State Medical Association and the Committee on Medical Defense are now studying future action.

1. Have you been sued by a patient in the last 12 months?

YES	NO	NO ANSWER
4	356	

TOTAL 360

2. If "yes" did you settle out of court?

YES	NO	NO ANSWER
1	2	

TOTAL 3

3. If you did not settle out of court, is the case still pending?

YES	NO	TOTAL 1
1		

4. Have you been sued by a patient in the last five years?

YES	NO	NO ANSWER
16	339	5

TOTAL 360

5. What are the limits of insurance you carry?

None	26
Blank	14
5-15,000	8
5-20,000	1
5-25,000	1
10,000	2
10-20,000	1
10-30,000	17
10-50,000	2
20,000	1
15-20,000	1
15-30,000	3
15-45,000	4
20-40,000	2
20-50,000	2
20-60,000	9 (L partnership)
20-100,000	1
25,000	4
25-50,000	6
25-75,000	36
25-100,000	1
30,000	2
30-60,000	1
30-70,000	1
30-90,000	3
30-100,000	1
40-120,000	4

50,000	5
50-100,000	13
50-150,000	62
50-200,000	1
60-180,000	1
75-150,000	4
100,000	6
100-150,000	1
100-200,000	3
100-300,000	89
150,000	4
150-450,000	11 (a group)
	2
Maximum	1
?	1
	3

TOTAL 360

6. Would you be willing to report all future suits to a Committee of the Medical Association as soon as they are instituted in an effort to gain experience to combat future suits?

YES	NO	NO ANSWER
344	12	4

TOTAL 360

7. Would you be interested in a group liability policy if the rates were lower than those you now pay?

YES	NO	4 Said it Depends
		1 Doesn't know
336	17	1 Retired not interested
		1 carries own protection
		TOTAL 360

**U OF MINNESOTA
PROVIDES SPEAKERS
FOR FALL MEETINGS**

The Fall Medical Symposium sponsored by the South Dakota State Medical Association and coinciding with the first five days of pheasant hunting season in Mitchell, will feature a team of speakers from the University of Minnesota headed by Dr. Robert Good of the Department of Pediatrics, with him will be Dr. Lyle French, neurosurgen and Dr. James Carey, internist.

Films, scientific papers, and panel discussions will be featured morning and evening and there will be a general get-together evenings for dinner and social activities. Hunting will be reserved for the usual afternoon hunting hours.

Out-of-state doctors and members of the South Dakota State Medical Association are invited to the meetings and the hunting. Some motel reservations may be available by writing the executive secretary.

ABERDEEN DISTRICT MEETS

The Aberdeen District Medical Society met September 4th. Their speaker, Dr. A. V. Stoesser, Clinical Professor of Pediatrics of the University of Minnesota, spoke on "Common Dermatologic Problems in Children." Dr. M. M. Morrissey, Association president made his presidential visit and John C. Foster, executive secretary of the Association also attended the meeting.

MEDICAL LIBRARY BOOKSHELF



Lange Medical Publications in Los Altos, California publishes several popular handbooks that are of special value for review purposes to practitioners, residents and graduate physicians preparing for specialty board examinations. Medical students have also found them of value as an aid to textbooks and for reviewing for examinations because of their concise outlines and excellent charts, diagrams, and photographs.

The one in the field of neurology is **Correlative Neuroanatomy and Functional Neurology** by Joseph G. Chusid and Joseph J. McDonald, 8th ed., 1956. The book is divided into four main sections: 1. Central nervous system including embryology, brain and spinal cord. 2. Peripheral nerves; with an outline of diseases of peripheral nerves; cranial, spinal and muscle innervation; cutaneous innervation and the autonomic system. 3. Principles of neurodiagnosis. 4. Disorders of the nervous system.

The drawings and photographs are of unusually fine quality and add much to the interpretation of the subject matter.

Review of Medical Microbiology by Ernest Jawetz; Joseph L. Melnick and Edward A. Adelberg, 2nd ed., 1956. According to the preface "The authors' intention in preparing the Review has been to make available a brief, accurate, up to date presentation of these aspects of medical microbiology which are of particular significance in the field of clinical infections and chemotherapy. It is directed primarily at the medical student, house officer and practicing physician."

In brief outline form is found a wealth of material on topics such as Bacterial Metabolism; Cultivation and Classification of Bacteria; Host-Parasite Relationships, and Micro-

organisms as well as Principles of Diagnostic Medical Microbiology and an important section on Viruses and Viral Diseases.

A gift copy of a 1956 Lange Publication by Mervin J. Goldman, assistant clinical professor of Medicine at the University of California School of Medicine entitled **Principles of Clinical Electrocardiography** has recently been received. The following review was written by Dr. Willard Read, a medical staff member in the Department of Physiology at the University of South Dakota:

This monograph is an excellent discussion of the basic concepts of electrocardiography. Emphasis is placed upon the unipolar leads. It will be of particular value to medical students who are just beginning the use of the electrocardiograph as a tool in diagnosis. Each discussion is amply and beautifully illustrated with clear line drawings. The author, after an introductory chapter and a brief chapter on electrophysiology of muscle, has included an excellent chapter on the definition of electrocardiographic configurations. These introductory chapters are followed by a discussion of normal complexes and their application to clinical electrocardiography. This is followed by illustrated chapters on hypertrophy patterns, bundle branch block, coronary artery diseases and the abnormal cardiac rhythms. The book contains a chapter on the electrocardiogram in infants and children. This is a welcome addition to monographs on basic electrocardiography.

This book should prove popular with medical students, internists and practitioners because of its fundamental nature, ease of reading and beautiful simplified illustrations.

Another valuable aid to anyone reviewing for the State Board examinations is the 9th

edition of **Goepp's Medical State Board Questions and Answers** edited by Harrison F. Flippen, Professor of Clinical Microbiology at the University of Pennsylvania, Saunders, 1957. Most of the material has been entirely rewritten to include the discoveries that have been made in recent years of physiologic and therapeutic importance such as the introduction of ACTH and adreno cortical steroids; new antimicrobial agents; measures for the control of malignant diseases; new cardiovascular drugs; improvements in anticoagulant therapy; a better understanding of water and electrolyte balance; advances in anesthesiology; new surgical techniques; new diagnostic procedures and the tranquilizers. All of the reliable up to date medical information is presented in a convenient and concise form.

For those taking National Board examinations there is a new 8th edition of **Rypin's Medical Licensure Examinations** edited by Water L. Bierring, Lippincott, 1957. The plan of this book is to present separate summaries of each subject and actual questions based on

the essential facts contained in each summary.

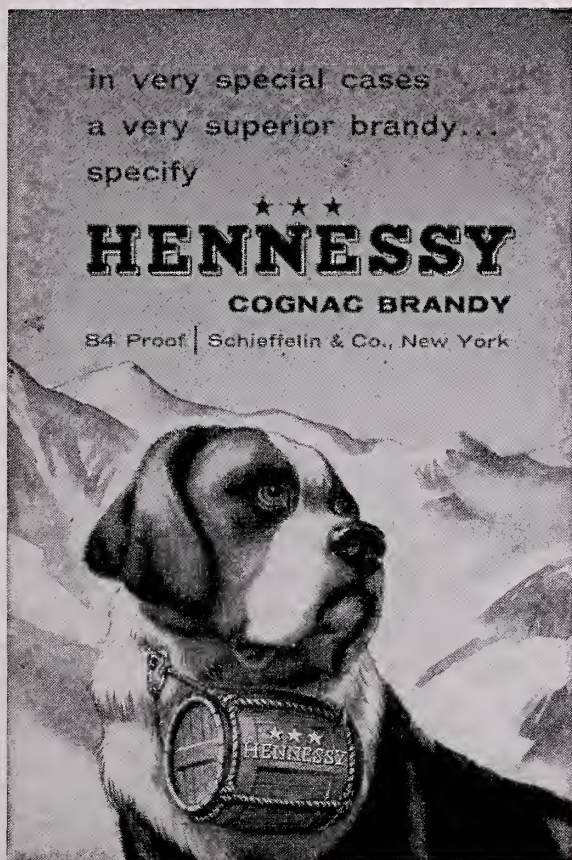
A selection of typical questions has been made following the review presented in each of the major medical subjects. The aim of this book is to assist those who have already been adequately trained in the medical sciences in organizing the important medical information in a practical and intelligent manner for examination purposes.

Mrs. Esther Howard
Medical Librarian

NEW BOOK

Williams and Wilkins has an excellent text on "Clinical Toxicology of Commercial Products" by Gleason, Gosselin, and Hodge.

The book, published in seven sections (using colors for easy location) covers first aid and emergency treatment, an ingredients index, a therapeutics index, supportive treatment, a trade name index, general formulations, and manufactures' names and addresses.



ANNUAL CLINICAL CONFERENCE

CHICAGO MEDICAL SOCIETY

March 4, 5, 6 and 7, 1958

Palmer House, Chicago

Lectures Teaching Demonstrations

Medical Color Telecasts

The CHICAGO MEDICAL SOCIETY ANNUAL CLINICAL CONFERENCE should be a MUST on the calendar of every physician. Plan now to attend and make your reservation at the Palmer House.

South Dakota Joint Commission for the Improvement of the Care of the Patient—

(Continued from Page 406)

Improvement of the Care of the Patient. Seconded by Miss Hubbs. Carried.

Sister Mary Innocentia suggested that the Annual Meeting be planned in advance. The date of the annual meeting was tentatively set for March, 12th, 1958.

Adjournment was moved by Dr. Vogele. Seconded by Jack Rogers. Carried.

Respectfully submitted,
Sister M. Heliodore, Sec'y

plans by the self-employed, now is assured of a hearing next year when the House Ways and Means Committee goes into all phases of taxation.

* * *

The Atomic Energy Commission has made its 100,000th shipment of radioisotopes, many of them for medical use.

* * *

The National Heart Institute, Bethesda 14, Md., has a new booklet, written in popular language, on cerebral vascular diseases.

* * *

THE MONTH IN WASHINGTON—

(Continued from Page 409)

Jenkins-Keogh legislation, for deferment of income taxes on money put into retirement

American Medical Association is cooperating with American Hospital Association in an effort to persuade the Federal Communications Commission to set aside radio channels for exclusive use of doctors and hospitals.



Phenaphen Plus is the physician-requested combination of Phenaphen, plus an anti-histaminic and a nasal decongestant.



Available on prescription only.

each coated tablet contains: **Phenaphen**
Phenacetin (3 gr.) 194.0 mg.
Acetylsalicylic Acid (2½ gr.) 162.0 mg.
Phenobarbital (¼ gr.) 16.2 mg.
Hyoscyamine Sulfate 0.031 mg.
plus
Prophepyridamine Maleate 12.5 mg.
Phenylephrine Hydrochloride 10.0 mg.



This is your MEDICAL ASSOCIATION

NEWS NOTES

Dr. Reuben J. Bareis has joined the staff of the Dawley-Kegaries Clinic in Rapid City. A graduate of Colorado with additional training in Michigan, Dr. Bareis will practice internal medicine.

* * *

Dr. Richard Gere, a native of Mitchell, S. D., has returned to his home town where he is associated with **Dr. R. Vonburg**.

The South Dakota Association for Retarded Children, Inc., has available a copy of a "Home Training Program for Retarded Children."

If interested in obtaining a free copy write to Mr. C. H. Snow, President, South Dakota Association for Retarded Children, Inc., Box 555, Mitchell, South Dakota.

Mary A. Schmidt, M.D. formerly at Watertown, has been appointed an assistant professor of pediatrics at Ohio State University.

* * *

Mrs. Harold Wahlquist, Minneapolis, former president of the Auxiliary to the AMA and well-known to doc-

tors and their wives in South Dakota, passed away August 19th.

The S. D. Veterinary Medical Association met in Sioux Falls September 19-20. **John C. Foster**, Executive secretary of the State Medical Association was the banquet speaker.

* * *

A. J. Lund, M.D. formerly associated with **Dr. F. S. Stahmann** in Sioux Falls, has moved to California.

* * *

John Hermanson, M.D., formerly at Valley Springs, is now located in Sioux Falls.

CRUISE CONGRESS OF HEMISPHERE OPHTHALMOLOGISTS

The Pan American Association of Ophthalmology, an 18-year-old organization with some 2,000 members representing all the countries of the Western Hemisphere, will hold its second Cruise Congress, February 1-14, on board the S. S. Queen of Bermuda. The itinerary includes a day each in San Juan,

Puerto Rico; Ciudad Trujillo, Dominican Republic; Kingston, Jamaica; Port-au-Prince, Haiti, and Nassau, Bahama Islands.

Dr. James H. Allen, New Orleans, is chairman of the program committee, which is arranging symposia, free papers, motion pictures, seminars and exhibits stressing subjects of current interest in diseases of the eye. Meetings will be held on ship-board and also in port cities with local societies of ophthalmologists. There will be opportunities to visit hospitals and to meet the staffs of medical schools in the islands.

Dr. William L. Benedict, Rochester, Minnesota, is chairman of the organizing committee, and **Mr. Leon V. Arnold**, 33 Washington Square West, New York 11, is in charge of arrangements. All reservations must be made through Mr. Arnold.

Officers of the Association include: **Drs. Brittain F. Payne**, New York, President; **Moacyr E. Alvaro**, Sao Paulo, Brasil, Executive Director; **J. Wesley McKinney**, Memphis, Tenn., Executive Secretary for North of Panama; and **Jorge Balza**, Buenos Aires, Argentina.

SAFETY PEOPLE SET WINTER SYMPOSIUM

State and local officials will meet in Washington, D. C., December 9 and 10 to assess the status of their traffic accident prevention efforts and to set priorities for measures necessary to reduce deaths and injuries on the streets and highways.

The meeting is being called by the President's Committee for Traffic Safety, which is headed by Harlow H. Curdice, president of General Motors.

Delegates to the conference will be named by national organizations of public officials—16 from each group whose members have responsibilities in the traffic-safety field. Invitations will be extended to municipal, county, and State officials, plus representatives of Federal agencies such as the Interstate Commerce Commission which have programs affecting motor transportation generally. Between 300 and 400 persons are expected.

On the basis of their advance study, the officials will determine immediate and long-range needs for accident prevention. They will indicate the needs for which public support is particularly urgent.

This official assessment of needs will be the basis for a series of regional citizen-support conferences in 1958, similar to those sponsored by the President's Committee in 1956.

BLOOD BANKING WORKSHOP SET

A workshop on Blood Transfusion methods will be held on November 13, 14, 15, and 16, 1957, at the University of South Dakota, School of Medicine, Vermillion, South Dakota.

This workshop has been arranged and sponsored by the University of South Dakota School of Medicine and the Extension Department of the University with the cooperation of the Blood Bank Committee of the South Dakota State Medical Association and the South Dakota Association of Pathologists.

The purpose of this three-day workshop will be to provide individuals, who are responsible for blood transfusions and blood banking in hospitals in South Dakota, with instruction in modern laboratory methods in this field. Since a complete familiarity with the actual performance of the laboratory methods is essential, the workshop will provide an opportunity for all participants to perform, with their own hands, and to gain proficiency with all of the basic techniques required for blood transfusions.

A minimum of lectures will be given to provide the necessary background, and the remainder of the time will be spent in the laboratory doing ABO groupings, Rh typings, and cross matching procedures, including the Coombs' test.

The workshop is opened to all medical technologists, Medical technicians, laboratory aides, and nurses on a first come, first served basis,

and the number of participants is limited to 20.

Doctors are requested to take up with their respective hospital administrations the question of sending a hospital laboratory worker to the workshop.

The Huron District Medical Society of Huron, S. D. is sponsoring their Third Annual Pheasant Hunting Seminar to be held October 26th and 27th. The program opens Saturday at 9:00 A.M. and will feature national medical speakers. This will leave ample time to get into the fields by noon each day. Contact D. J. Buchanan, M.D. Secretary, Huron, S. D. for information on daily bag limits, stag for the registrants, room reservations, etc.

INTERNISTS MEET IN SIOUX FALLS

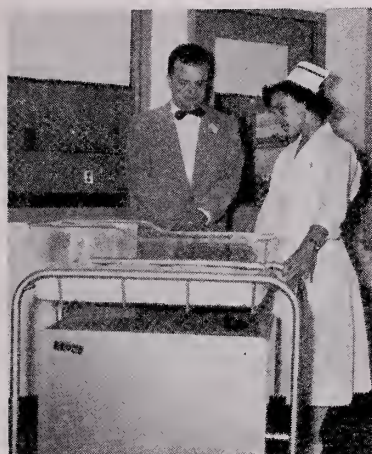
The South Dakota Society of Internal Medicine held its annual meeting in Sioux Falls September 14th at the Sheraton Carpenter Hotel.

On the program were Dr. Donalee L. Tabern, Abbott Laboratories, Chicago; Dr. Francis Grande, U. of Minnesota; and Dr. Dwight McGoon, Mayo Clinic.

During an afternoon business session, the following officers were elected: President — Warren P. Jones, M.D., Sioux Falls; President-elect — Mary E. Sanders, M.D., Redfield; and Secretary-Treasurer — Robert Thompson, M.D., Yankton.

The group also adopted a new constitution and by-laws.

ARMOUR DEDICATES NEW HOSPITAL



John C. Foster of Sioux Falls, executive secretary of the South Dakota Medical Association, is shown inspecting one of the new basinettes in the new Douglas County Community Hospital. The new equipment is being explained by nurse Darlene Meiers.

WATERTOWN HAS PREXY VISIT

The Watertown District Medical Society met September 4th to receive the State Association's presidents' visit. Dr. Morrissey spoke on the activities of the Board of Charities and Corrections of which he is a member. Executive-Secretary Foster talked on Medicare.

S.D.J.C.I.C.P. MEETS IN HURON

The South Dakota Joint Commission on Improvement of the Care of the Patient met in Huron September 18th at the Marvin Hughitt Hotel. Eighteen members and guests were present. Representatives of the State Medical Association present were D. J. Buchanan, M.D., Huron; C. L. Vogeles, M.D. Aberdeen; M. E. Sanders, M.D., Redfield; J. A. Muggly, M.D., Madison and John C. Foster, Sioux Falls.



Located in the Northeast section of Armour is the beautiful one-story brick Douglas County Community Hospital which was put into use this week. H. B. Bowyer and sons of Yankton was the general contractor of the building which measures 145 feet by 36 feet through the long section of the building with a 70 by 45 wing off to the north side and a 30 by 22 waiting room section on the south side. To the east of the building (at far right) is a porch for the convenience of convalescing patients and for visitors. There are four private and six two-bed rooms in the hospital proper plus one private and two double rooms in the maternity ward. The operating, delivery and emergency rooms have been equipped with explosion proof floors. Each room is equipped with oxygen.



A shot of a part of the crowd of 700 who listened to the Medical Associations executive secretary dedicate the new hospital.



An exhibit that drew good crowds during the State Fair Week was the AMA's "Your Bones and Muscles" sponsored by the South Dakota State Medical Association. Miss Phyllis Sundstrom (left) office manager watches two unidentified fair-goers operate the exhibits.



Dr. Carmen Sutley, Ft. Pierre dentist, helps man the Dental Association booth at the Fair. Kids from all over the state received sample tooth brushes and educational literature.



State Department X-ray technicians shot more than 3,000 chest x-rays during Fair week. This was the most popular feature in the health building.



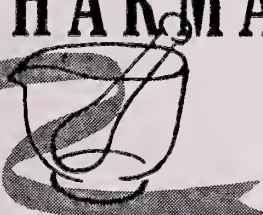
The Division of Laboratories, State Department of Health, tested well over a thousand Fair visitors for diabetes. Blood sugars were done on the spot with results to go to the person tested and his doctor.



Lee Aase, director of the Vital Statistics division, State Department of Health looks on as a staff member gathers information to trace down a birth certificate.



The S. D. T. B. and Health Association has its health poster exhibit just outside the x-ray room. Publicity done by Association has been instrumental in increasing numbers to be x-rayed each year.



PHARMACEUTICAL

SECTION

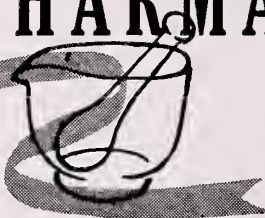
HAROLD S. BAILEY, PH.D.

EDITOR

Division of Pharmacy
South Dakota State College
Brookings, South Dakota

PHARMACEUTICAL

Paper



THE SOUTH DAKOTA PRESCRIPTION SURVEY, 1956

by

Harold S. Bailey, Ph.D.*
Brookings, South Dakota

Early in 1957 a detailed study of prescriptions filled in South Dakota pharmacies was undertaken. Also, certain economic characteristics of prescription departments in this state were obtained. From the study of this data a number of facts resulted which we hope will be of interest to pharmacists in South Dakota.

Such a study as this could not be accomplished without the combined efforts of many. Therefore, the author would like to express his deep appreciation for the cooperation of South Dakota pharmacists, the students and administration of the Division of Pharmacy and the Machine Records Service of South Dakota State College.

There have been many prescription ingredient surveys over the last 60 years to determine drug usage. These have been both national and local in scope. The last few years have seen an increase in this activity on the part of national drug publications and pharmaceutical manufacturers. The facts gained by these surveys are of great value in market research, U.S.P. and N.F. revision and medical statistics. Also, these national surveys are of great value to the individual pharmacist. National surveys, however, are not necessarily complete enough to give an accurate picture of prescribing tendencies and phar-

maceutical economics in an individual state. The economy of the Great Plains area is different than that of either coast and, in particular, the economy of a state as sparsely settled as South Dakota varies from that of the industrialized states. For this reason the South Dakota Prescription Survey was undertaken. To the writer's knowledge no such study has preceded this one in South Dakota.

Scope of the Survey

The information gathered corresponds (with some deletions and additions) to that of The Massachusetts Prescription Survey (1), and the Prescription Study of the Pharmaceutical Survey (2). Basically our study is divided into two main areas. One area is the study of certain economic facts concerning prescription department operations in South Dakota. Included is data on the "average" South Dakota pharmacy, prescription pricing, prescription volume, new prescription vs. refill prescription ratios and comparisons between rural and urban pharmacies. The latter study is to be reported separately in a subsequent paper.

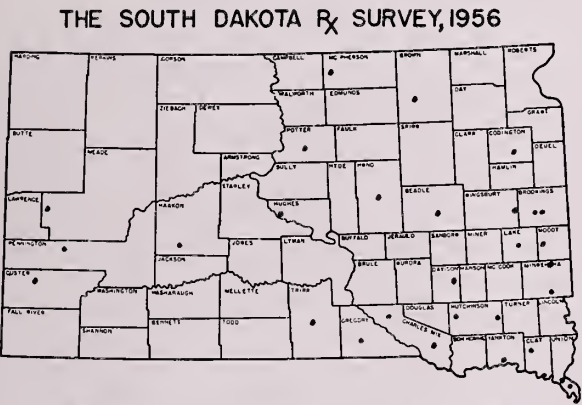
The second area is the study of certain professional aspects of the prescriptions dispensed in South Dakota pharmacies. This ingredient analysis consists of a study of compounded vs. dispensed prescriptions, forms of medication, number of ingredients, language, metrology, refill status, therapeutic classifica-

*Associate Professor of Pharmaceutical Chemistry, Division of Pharmacy, South Dakota State College.

tion, source and chemical identity of the ingredients. Characteristics of those prescriptions requiring compounding techniques are also reported.

Survey Methods

A total of 32 pharmacies participated in the survey. The pharmacies selected represent 12.75% of the total number of pharmacies in South Dakota and are located in 24 counties which include 57% of the state population. Most of the larger cities of the state are represented by the sample as well as predominantly rural areas. The prescription volume of the stores studied varied from an average of less than one prescription per day to over forty per day. The distribution of pharmacies participating in this study is shown in Figure 1.



Distribution of cooperating pharmacies

FIGURE 1

All of the data required was gathered by junior and senior students of the Division of Pharmacy, South Dakota State College. The analysis of the prescriptions was carried out with the use of punch cards (I.B.M.) through the facilities of the Machine Records Service of the College.*

Monthly data from each pharmacy was gathered on new and refill prescription volume and total for the year determined. The prescription sample thus obtained amounted to 347,999.

A total of 9,841 prescriptions were analyzed for ingredients. This represented all of the new prescriptions dispensed by the cooperat-

*The author is indebted to Mr. Donald C. Lockwood and his staff for assistance with the analysis of the data.

ing pharmacies within the second weeks of March, July and October, 1956. The exact dates are March 11-17, July 8-14 and October 7-13. These three periods were selected to avoid holidays. Also, by combining the prescriptions from these periods, any discrepancy due to seasonal variation is minimized.

The name of the ingredient(s), dosage form, exact price, language, metrology and refill status of each prescription was recorded directly from Rx files by the field division of the survey staff. The therapeutic classification, source and chemical identity of the ingredient(s) for each prescription was added later following study of each prescription individually. For those items not listed in the "official compendia", "Modern Drug Encyclopedia", Howard (3) and "Facts and Comparisons" (4) were used to determine individual drugs in each preparation.

The "Average" South Dakota Pharmacy

The average South Dakota pharmacy is a theoretical concept. The statistical figures provided are unreal and would coincide with a particular store only by chance. However, the "average" figures provide a point from which comparisons can be made and they are presented in Table I for that purpose.

Table I
THE AVERAGE SOUTH DAKOTA PHARMACY, 1956

Population per pharmacy—	2700
Registered Pharmacists—	1.96
New prescriptions per person per year	2.11
Refill prescriptions per person per year	1.94
Total prescriptions per person per year	4.05
New prescriptions per pharmacy per year	5,670
Refill prescriptions per pharmacy per year	5,205
Total prescriptions per pharmacy per year	10,875
Daily new prescriptions per pharmacy	15.54
Daily refill prescriptions per pharmacy	14.26
Daily total prescriptions per pharmacy	29.80
PRESCRIPTION INCOME	
Average price per prescription—	\$2.68
Annual prescription cost per person	\$ 5.66
Annual refill prescription cost per person	\$ 5.20
Annual total prescription cost per person	\$10.86
Annual new prescription income per phar.	\$15,195
Annual refill prescription income per phar.	\$13,950
Annual total prescription income per phar.	\$29,145
Daily new prescription income per phar.	\$41.65
Daily refill prescription income per phar.	\$38.22
Daily total prescription income per phar.	\$79.87

There were 253 pharmacies in South Dakota on June 13, 1956 and 251 licensed on December 31, 1956. For the computations in Table I the figure 252 was used as the average number of pharmacies for the year. Since the

INTRAVENOUS Compatible with common IV fluids. Stable for 24 hours in solution at room temperature. Average IV dose is 500 mg. given at 12 hour intervals. Vials of 100 mg., 250 mg., 500 mg.

ACHRO

THERAPEUTIC BLOOD LEVELS ACHIEVED

Many physicians advantageously use the parenteral forms of ACHROMYCIN in establishing immediate, effective antibiotic concentrations. With ACHROMYCIN you can expect prompt

INTRAMUSCULAR Used to start a patient on his regimen immediately, or for patients unable to take oral medication. Convenient, easy-to-use, ideally suited for administration in office or patient's home. Supplied in single dose vials of 100 mg., (no refrigeration required).

MYCIN



Hydrochloride
Tetracycline HCl Lederle

IN MINUTES -- SUSTAINED FOR HOURS

control, with minimal side effects, over a wide variety of infections - reasons why ACHROMYCIN is one of today's foremost antibiotics.

last United States Census was taken in 1950, the population figures are not accurately known for 1956. An estimate places the population for 1956 at 677,000 or approximately 2,700 persons per pharmacy.

The Proceedings of the South Dakota State Pharmaceutical Association for 1956 listed 493 resident registered pharmacists. This is an average of slightly less than two (1.96) per pharmacy.

The new and refill prescriptions per pharmacy per year figures were obtained from a count of new and refill prescriptions in the participating stores (347,999 prescriptions). For the daily averages per pharmacy a 365 day year was assumed. If the 5 holidays (New Year's Day, Independence Day, Labor Day, Thanksgiving and Christmas) are included, then the daily new prescription average 15.75, the refills average 14.45 and the total average is 30.20 prescriptions per pharmacy.

The average price per prescription in South Dakota in 1956 was \$2.68. This figure was obtained from the 9,841 prescription ingredient sample. For the same three one week periods the national average prescription price was \$2.82 or 14 cents higher than the South Dakota figures (5). If one assumes that the prescribing trends of South Dakota are no different than those of the national, then there was a loss in income on the average of about \$1,500 per pharmacy in South Dakota due to the lower average price. This matter will be discussed further under prescription pricing.

The rest of the figures under prescription income are derived by multiplying the new and refill prescription totals by \$2.68.

The public relations value of some of the figures in Table I should be stressed. For example the average spent by each person in South Dakota on prescription medication is only \$10.86. This is very low compared to the amount spent on alcoholic beverages and tobacco products per capita. To take a different point of view, the average price of a prescription in South Dakota is only a few cents more than the cost of a carton of cigarettes.

Prices of South Dakota Prescriptions, 1956

The prices of South Dakota prescriptions

PRICES OF SOUTH DAKOTA R_x, 1956

% of total	National	South Dakota
100 -	5.6	6 + 5.6
90 -	4.5	5-6 5.3
80 -	7.9	4-5 9.3
70 -	11.2	3-4 9.2
60 -	20.2	2-3 17.9
50 -		
40 -	37.6	1-2 32.1
30 -		
20 -		
10 -	13.2	To \$1 20.6
0 -		

FIGURE 2

compared to a national survey (5) are found in Figure 2. The prices are divided into percentages of those in each one dollar category up to \$6 plus for comparison. It can be seen that approximately the same percentage of prescriptions in South Dakota cost up to \$2 (52.7%) as do those filled across the nation (50.8%). However, 20.6% of our prescriptions cost less than one dollar compared to a national average of 13.2%. This unusually great variation was studied at some length. We know that the cost of chemicals and medicinal preparations across the nation is relatively constant. A study of national prescribing trends during the periods of the survey showed no extreme deviations from the South Dakota figures which would account for higher prices elsewhere. Instead, we found that antibiotic prescribing was over 10% greater in South Dakota than nationally. This should have had the tendency to increase the percentage of prescriptions in the higher price categories.

We have, therefor, reached the conclusion that in some cases prescriptions dispensed in South Dakota are priced without thought to the actual or average costs involved and at least a trace of profit.

Table II shows the percent of prescriptions filled in South Dakota in 1956 falling in various price ranges under 85 cents.

Table II PRESCRIPTIONS PRICED UNDER 85 CENTS		
Price Range	% of Total Prescriptions	
.00 - .50	1.5	
.00 - .60	2.7	
.00 - .75	8.4	
.00 - .85	11.2	

On the basis of these figures it is safe to assume that close to 8% of all the prescriptions filled in this state during 1956 could be classified as "charity prescriptions" since they are sold at a loss. A recent survey (1) states that on an average it takes about 12 minutes to receive, translate, fill, check, label, number and file the prescription order, and to explain, wrap, deliver the drug and clean the prescription bench. Using a salary charge of \$2.50 an hour, the salary cost alone is 50 cents for each prescription. However, if the more realistic professional fee of \$4.20 per hour recommended in the prescription pricing schedule of the National Association of Retail Druggists is used, the average professional fee cost per prescription amounts to 84 cents. The actual cost of the drug, container, a share of the overhead and a profit must be added to these figures. It should be clear, therefore, that prescriptions from 1 cent to well up into the 70 cent group and, depending on salary costs, even higher, are actually sold at a loss and are charity prescriptions. In order to have the prescription department support itself, no prescription (except in case of charity) should be sold for less than all the average or actual costs involved and at least a small profit.

Prescription Ingredient Analysis

The 9,841 prescription sample was used for analysis of the nature of prescriptions dispensed in South Dakota in 1956. The results of this analysis are presented as a per cent of the total prescriptions studied in Table III. Also included in the table is a comparison with the results of the national pharmaceutical survey of 1946. The discussion following the Table refers to the items under the headings found in Table III.

Table III THE SOUTH DAKOTA PRESCRIPTION SURVEY, 1956			
Prescription Ingredient Analysis			
Factor	Percent of Total Prescriptions		
	South Dakota, 1956	National Pharmaceutical Survey, 1946	
Dispensed Prescriptions	94.1	74.1	
Compound Prescriptions	5.9	25.9	

Form of Medication		
Liquid	28.5	34.7
Tablet	41.5	33.0
Capsule	18.6	17.1
Ointment	7.3	6.5
Powders (Bulk)	0.8	2.5
Lozenge	1.2	1.4
Powders (Divided)	0.1	0.8
Suppositories	0.9	0.7
Parenteral Solutions	0.2	0.7
Pill	0.1-	0.4
Soap	0.0	0.1
Applicator	0.1	0.1-
Inhaler	0.2	0.1-
Frangible Ampuls	0.1-	0.1-
Cataplastm	0.0	0.1-
Plaster	0.0	0.1-
Tampon	0.0	0.1-
Other	0.5	2.0
Number of Ingredients		
1 Ingredient	89.7	77.4
2 Ingredients	8.5	10.2
3 Ingredients	1.2	6.1
4 Ingredients	0.4	3.8
5 Ingredients	0.1	1.5
6 Ingredients	0.1-	0.6
7 Ingredients	0.1-	0.3
8 Ingredients	0.0	0.1-
9 Ingredients	0.1-	0.1-
Prescriptions in Which Some Form of Latin Was Used		
Metrology	83.3	58.3
Metric system	30.2	15.7
Apothecary system	30.5	58.1
Metric and Apothecary	1.0	0.0
No Metrology	38.3	26.2
Prescriptions Not Refillable by Law		
No indication by M.D.	(66.5)	
Number Refills stated by M.D.	(3.3)	
Non-rep. (N.R.) stated by M.D.	(2.5)	
Narcotic Prescription	(7.2)	
P.R.N. stated by M.D.	(5.4)	
Refillable Prescriptions	15.1	82.9
Prices Charged for Prescriptions		
Less than \$0.50	1.5	3.3
\$0.51 to \$0.75	6.9	12.3
\$0.76 to \$1.00	12.2	21.1
\$1.01 to \$1.25	8.2	16.0
\$1.26 to \$1.50	9.4	13.9
\$1.51 to \$1.75	6.2	10.1
\$1.76 to \$2.00	8.3	4.1
\$2.01 to \$2.25	3.5	3.5
\$2.26 to \$2.50	5.5	2.2
\$2.51 to \$2.75	2.9	2.4
\$2.76 to \$3.00	6.0	1.2
\$3.01 to \$4.00	9.2	4.2
\$4.01 to \$5.00	9.3	1.6
\$5.01 to \$6.00	5.3	0.8
\$6.01 to \$7.00	1.7	0.6
\$7.01 to \$10.00	3.1	0.4
\$10.01 and over	0.8	0.3
Price not stated	0.0	2.0
Principal Therapeutic Class of Prescription		
Analgesic	9.6	8.4
Anesthetic	0.7	0.9
Anti-infective (local)	10.9	15.3
Anti-infective (systemic)	21.4	6.7
Ataraxics	5.6	0.0
Autonomic	4.1	8.5
Cardiovascular	2.2	4.9
Choleretic	0.9	0.9

Cough Preparations	3.3	5.6
Diuretic, Urinary		
Antiseptic	1.5	1.8
Gastrointestinal	6.2	7.6
Antacid (1.0)		
Laxative (0.8)		
Other (4.4)		
Hematinic	3.3	4.9
Histamine Antagonists	5.3	2.0
Hormone	6.3	5.7
Sex (2.1)		
Adrenal Cortical (0.5)		
Other (3.8)		
Metabolic	0.6	2.5
Sedative	6.0	9.2
Barbiturate (4.5)		
Other (1.5)		
Vitamin	7.3	10.4
Prophylactic (0.4)		
Therapeutic (6.9)		
Other	4.5	4.7
Source of Ingredients		
Single item Prescriptions calling for:		
USP items only	8.4	14.9
USP items, brand specified	28.3	3.1
NF items	1.1	3.1
NF items, brand specified	0.2	0.3
Prescription Specialty items	50.0	50.2
Two or more item Prescriptions calling for:		
USP items only	2.0	7.3
USP and NF	3.1	3.5
USP and Prescription Specialty items	3.7	6.7
NF items only	0.2	0.1-
NF and Prescription Specialty items	1.7	0.4
Prescription Specialty items only	1.3	1.4
Unidentified	0.0	9.1
Chemical Identity		
Organic only	75.0	Not determined
Inorganic only	2.9	
Organic and Inorganic Preparations	2.8	
Animal and Vegetable Drugs	15.7	
	3.6	

Dispensed and Compounded Prescriptions

The term dispensed prescription is used to indicate those prescriptions calling for a single item which the pharmacist purchased and provided either in his own or in the original container.

The term compounded prescription refers to one-ingredient prescriptions which the pharmacist manufactured, and those prescriptions calling for two or more ingredients which the pharmacist combined.

The figures shown in Table III give an indication of the drastic change in prescribing which has occurred in the past ten years. However, the percent of prescriptions compounded in South Dakota (5.9) is lower than the national average of approximately 7%. There were several pharmacies that filled no

compounded prescriptions during the period of the survey. Variations in the percent of prescriptions compounded were from none to a high of 30%.

The highest levels of compounding naturally appeared in those pharmacies receiving more dermatological prescriptions where the medication is quite individualized for the patient. There is some indication that this individualization of dosage may result in general practitioners calling upon the pharmacist for more compounding in the future.

Form of Medication

A comparison of several surveys is presented in Table IV which indicates the change which has taken place in the relative frequency with which the common forms of medication are used.

Form of Medication	Table IV RELATIVE PRESCRIBING PREFERENCE OF VARIOUS MEDICATION FORMS Year of Survey and Rank					
	1932	1940	1945	1946	1948	1956
Liquids	1	1	2	1	1	2
Capsules	2	2	3	3	3	1
Tablets	3	3	1	2	2	3
Ointments	4	4	4	4	4	4
Divided						
Powders	5	5	-	-	5	-
Bulk Powders	-	-	5	5	-	5

Number of Ingredients

Although the number of one-ingredient prescriptions is at the highest level in the history of pharmacy, it should be pointed out that a large number of those are actually preparations which contain several therapeutic ingredients. In this survey no distinction was made between those prescriptions containing one ingredient and prescriptions with one name indicating a number of ingredients.

Prescription Latin

The number of prescriptions in which some form of Latin was used amounted to 83.3% of the total. There was no prescription written entirely in Latin. In most cases the Latin appeared in the Sigma in abbreviation form in combination with English.

Metrology Used

There are two significant facts to be pointed out from this data. First, the use of the metric system of weights and measures has increased from 9.4% in 1927; 11.1% in 1932 and 15.7% in 1946 to 30.2% or almost one-third of the prescriptions written in the present survey. Second, there is a large percentage (38.3) of prescriptions in which no metrology appears.

Refillable and Non-refillable Prescriptions

The effect of the Durham-Humphrey Act and the increase in prescribing of potent medication is evident from a comparison of prescriptions classified as refillable in 1946 (82.9%) and in 1956 (15.1%). Because of the confusion which originally resulted from the regulation that no prescription calling for a legend drug could be refilled without authorization from the physician, we studied the refill status of these prescriptions. From Table III it will be noticed that two out of every three prescriptions in South Dakota in 1956 contained no directions to the pharmacist for refilling the prescription. Three percent stated the number of refills allowed, 2.5% stated not-refillable, 5.4% had the notation refill as needed and 7.2% of the prescriptions were for narcotics. We can conclude, therefore, that the pharmacists of South Dakota are making an average of about ten phone calls per day to the physicians in their area concerning refill prescriptions if the law is functioning. It might be interesting to note that this amounts to about 3,500 calls per year for the average South Dakota pharmacy (two-thirds of 5,200 refills per year).

Prices Charged for Prescriptions

Since this material is discussed in another part of this paper, we will only mention here that in 1946 the average price for all prescriptions was \$1.45. The mode (price at which the largest number of prescriptions was filled) was \$1.00.

Therapeutic Class of Prescriptions

Table III also shows the principle therapeutic class into which each prescription falls.

The therapeutic classes are for the most part those found in new and non-official remedies. A few changes were made in order to show a comparison with the classification used in 1946 by the prescription study of the pharmaceutical survey. One new class was added (Ataraxics). There were no drugs of this type in 1946. It is interesting to note that sedatives are now being prescribed at about two-thirds of the level of ten years ago. This is no doubt due to the use of tranquillizers in some of the cases where sedatives were formerly prescribed.

The influence of the antibiotics is shown in the tremendous rise in systemic anti-infective prescriptions over that of 1946. Also, there is the possibility that some local infections are

being treated systemically as compared to prescribing practice of ten years ago (10.9% local anti-infectives, 1956; 15.3% local anti-infectives, 1946).

Source and Chemical Identity

According to the results of this survey as found in the portion of Table III headed Source of Ingredients, almost half of all prescriptions are for official drugs. These are prescribed either by the official name (14.8% if the combinations with specialty items are not included) or brand name (28.5%).

Of the slightly over half of all drugs prescribed which are non-official, a large number were introduced as therapeutic agents in the last few years since revisions of the official compendia were printed. It should be noted, however, that some of the proprietary preparations contain USP and NF drugs. The extent of this was not determined in this survey.

The term prescription specialty includes drugs and preparations that are proprietaries (prescribed by a proprietary name) and a few unofficial drugs supplied by several companies under the same name.

The last portion of Table III shows the chemical identity of prescription ingredients. Substances of an organic nature (organic chemicals, preparations and animal or vegetable drugs) make up almost the entire therapeutic armamentarium today. Animal and vegetable drugs make up 3.6% of the total. This figure is somewhat misleading. The antibiotics and certain other organic chemicals obtained from animals or vegetables were not included in this class as they are organic chemicals and fit more properly into the organic chemical group of our empirical classification. If all of the drugs of animal or vegetable origin were classified as such, it would be safe to say that at least one-fifth of our prescriptions today contain drugs of that source.

Compounded Prescriptions

The results of an analysis of the compounded prescriptions filled during the survey period appear in Table V. Compounded prescriptions are defined for our study as one-ingredient prescriptions which the pharmacist manufactured and those prescriptions calling for two or more ingredients which the pharmacist combined.

Table V
COMPOUNDED PRESCRIPTION INGREDIENT ANALYSIS

Factor Percent of Total Compound Prescriptions
Form of Medication

Liquid	63.1
Tablet	0.0
Capsule	19.6
Ointment	15.6
Powders (bulk)	0.7
Powders (divided)	0.5
Suppositories	0.2
Other	0.3

Number of Ingredients

1 Ingredient	8.8
2 Ingredients	67.9
3 Ingredients	15.3
4 Ingredients	5.0
5 Ingredients	1.8
6 Ingredients	0.5
7 Ingredients	0.5
8 Ingredients	0.0
9 Ingredients	0.2

Prices Charged for Prescriptions

Less than \$0.50	0.9
\$0.51 to \$0.75	10.4
\$0.76 to \$1.00	15.5
\$1.01 to \$1.25	11.7
\$1.26 to \$1.50	13.4
\$1.51 to \$1.75	10.8
\$1.76 to \$2.00	9.1
\$2.01 to \$2.25	2.1
\$2.26 to \$2.50	5.2
\$2.51 to \$2.75	2.3
\$2.76 to \$3.00	5.9
\$3.01 to \$3.50	1.9
\$3.51 to \$4.00	2.1
\$4.01 to \$4.50	1.9
\$4.51 to \$5.00	2.8
\$5.01 to \$6.00	2.6
\$6.01 to \$7.00	0.7
\$7.01 to \$8.00	0.5
\$8.01 to \$9.00	0.2
\$9.01 to \$10.00	0.0
\$10.01 and over	0.0

Principal Therapeutic Class of Prescription

Analgesic	18.9
Anesthetic	0.7
Anti-infective (local)	26.2
Anti-infective (systemic)	9.0
Ataraxics	0.0
Autonomic	2.3
Cardiovascular	0.2
Choleretic	0.0
Cough Preparations	18.2
Diuretic, Urinary Antiseptic	0.5
Gastrointestinal	12.3
Antacid (0.5)	
Laxative (0.3)	
Other (11.5)	
Hematinic	0.3
Histamine Antagonists	0.9
Hormone	1.2
Sex (0.0)	
Adrenal Cortical (0.2)	
Other (1.0)	
Metabolic	0.3
Sedative	1.9
Barbiturate (1.4)	
Other (0.5)	
Vitamin	1.9
Prophylactic (0.0)	
Therapeutic (1.9)	
Other	5.2

Source of Ingredients

Single item Prescriptions calling for:	
USP items only	7.6
USP items, brand specified	4.3

NF items	1.9
NF items, brand specified	0.3
Prescription Specialty items	10.3
Two or more item Prescriptions calling for:	
USP items only	12.3
USP and NF	20.4
USP and Prescription Specialty items	23.9
NF items only	1.2
NF and Prescription Specialty items	9.7
Prescription Specialty items only	8.1

Chemical Identity

Organic only	45.8
Inorganic only	4.7
Organic and Inorganic	14.9
Preparations	29.6
Animal and Vegetable Drugs	5.0

From these results it can be seen that the majority of the compounding done involves liquids with two ingredients. A study of the prescriptions themselves showed that this usually involved the solution of a chemical in a liquid. About one of every five compounded prescriptions are for capsules with ointments next in demand and a few calls for bulk and divided powders, suppositories and other forms of medication.

It was interesting to note that prescriptions were compounded for almost all of the principal therapeutic classes. The majority of compounded prescriptions were for local anti-infectives, analgesics and cough preparations with a sizeable number of gastrointestinal and systemic anti-infectives also prescribed.

The use of proprietary formulations in compounding is evident from an inspection of the Source of Ingredient portion of Table V. Prescriptions composed entirely of manufacturers prescription specialty items accounted for 18.4% of the total compounded prescriptions. If those prescriptions which call for brand name official drugs and specialty items are added, the number of prescriptions which call for manufactured products amounts to 56.6 percent of those compounded in South Dakota.

The Chemical Identity figures show that inorganic chemicals appear more frequently in compounded prescriptions (4.7%) than in dispensed prescriptions (2.7% if compounded prescriptions are subtracted from the figures appearing in Table III).

Also a sizable portion (14.9%) of the prescriptions compounded combine inorganic with organic constituents.

The prices charged for compounded prescriptions are interesting. Using the facts
(Continued on Page 432)

PHARMACEUTICAL *Paper*



SOUTH DAKOTA PHARMACY AND ANIMAL HEALTH*

by

J. C. Shirley, R.P.**

Brookings, South Dakota

As the animal health supply business grows, and the trend toward self-service increases, pharmacists find it more and more difficult to find space in which to properly carry on veterinary and animal health activities. I was asked to write on the origin of our department and how we promote animal health pharmacy.

The business we took over eleven years ago had a fairly well established animal health department and good farm traffic. There is an excellent basement in the building, but it was dark and dingy, and had never been used for anything but storage. About a year ago, we hit on a scheme to remodel a section of that basement to what we now call our Farmer's Room. Here, the storage space for our farm pharmaceuticals and agricultural chemicals has been converted to display and meeting area. The accompanying picture (Figure 1) will show that we have moved our refrigerator, with animal health biologicals, and tables and chairs into this room. Up to 25 persons for small meetings can be accommodated.

Local farm organizations have been invited to use this room for their gatherings. The response was gratifying. The Board of the

*Reprinted from *Animal's Healthmate* Vol. 5, No. 4, pg. 6 (1957) through the courtesy of the American Animal Health Pharmaceutical Association.

**Owner, Shirley Pharmacy, Brookings and Treasurer, South Dakota State Pharmaceutical Association.



Figure 1. Downstairs Animal Health Department, Shirley Pharmacy, Brookings, South Dakota.

Brookings County Milk Council has met here, as well as the County Agricultural Stabilization and Conservation Service, township chairmen, and several town organizations.

One small veterinary school in conjunction with Globe Laboratories was held at which 18 very interested stockmen were in attendance. The instructor in the animal health pharmacy course at South Dakota State College has also conducted two classes in the room. This is the beginning of what we feel is a great potential in the use of this area of our pharmacy. Our former storage space has become effective display space and everything we carry is now displayed. Also, a large instrument board is maintained in this room with a special rack under it for manufacturer's literature. We have included a tele-

phone, radio, and television set in the area, in an effort to induce rural folks to utilize the room. Coffee is also available.

The library includes a Medical Dictionary, Seider's Livestock Health Encyclopedia, the 1956 Yearbook of Agriculture on Animal Disease which, incidentally, is available free by writing your congressman, Hadley's Principles of Veterinary Science, Merck's Veterinary Manual, and the Pesticide Handbook. We also subscribe to, and make available to our customers, Doanes' Agricultural Digest. This publication is a twice monthly service on everything new in agriculture. The current subscription list also includes six of the most popular farm magazines in this area. As these arrive we go through them and pick out articles of interest in the animal health field. Then, on the front cover of each publication, the article and the page number is noted. Many times this little gimmick has aided us in making a sale or answering a question and in either case, satisfying a customer.



Figure 2. Upstairs Animal Health Area, Shirley Pharmacy, Brookings, South Dakota.

A small animal health section is still maintained upstairs, with an instrument board, (figure 2). Here the pet remedies and the fastest moving veterinary items are displayed. However, any sale that takes time or involves much discussion is taken downstairs out of the traffic into an atmosphere that is conducive to the customer's and our mutual satisfaction.

Also, a limited amount of parking is provided in the rear and rural folks are invited to use the rear entrance.

Our present advertising program is confined almost entirely to direct mail, and an early morning radio spot daily, supplemented with one or two classified ads which are changed weekly.

In summary then, if our experience is indicative, it would benefit pharmacists to explore the possibilities for creation of an animal health area from an unused backroom, balcony or basement.

I would like to touch on another subject on which Mr. John M. Bierer of Lexington, Va. wrote in the January 1957 issue of *Animal's Healthmate*. It is high time that we, as pharmacists, get together with the veterinarians, and recognize each other's qualifications in supplying animal health pharmaceuticals. One of the biggest threats I see to animal health and animal health business is the entry of many unqualified persons in the field. By that, I mean people with no educational or other background, except the desire to make a nickel. The threat, added to the complacency of the people in both professions, may result in legislation or control, administered by others than those in the professions. Here in South Dakota the Executive Committee of the South Dakota State Pharmaceutical Association has given the go-ahead to a committee which will work with the state veterinarian's association, and the State Department of Agriculture, in this regard. That is only a step, but we hope it is in the right direction.

PRESIDENT'S PAGE

Rx



In Memoriam

The members of the South Dakota Board of Pharmacy, South Dakota pharmacists and the allied professions will greatly miss Milford L. Schwartz of Huron who recently passed away. His was always the friendly greetings, ever-ready smile and many extra hours giving freely of himself for the advancement and progress of pharmacy.

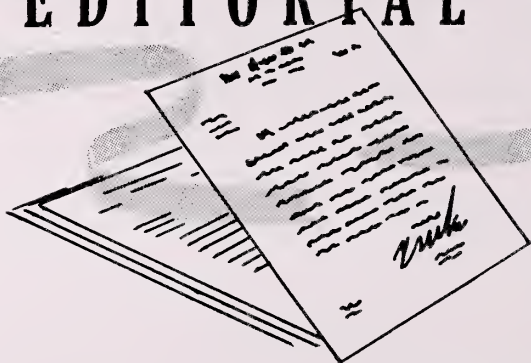
His kindness to the student pharmacists who took their State Board examinations under him will long be remembered. He was always ready to lend a helping hand in the solution of the many problems which confront both the examining board and the executive board of the State Pharmaceutical Association.

We wish to express our sincere sympathy to his wife, Eleanor, his family and many friends.

Very truly yours,

George A. Lehr

EDITORIAL PAGE



INFLUENZA

by

Dr. Leroy E. Burney*

During recent weeks the eyes of the medical profession have been on the influenza epidemic which swept through the Far East. Thus far only sporadic outbreaks have occurred in this country, affecting several thousand people. Experts in the field say there is little question that we will have an epidemic in this country sometime during the fall and winter months.

Since 1948 the Influenza Study Program sponsored by the World Health Organization has maintained a system of reporting specific diagnoses of influenza in the United States, Canada, South America and Europe.

The current epidemic was first reported in Hong Kong and Singapore in late April, 1957. Epidemics followed rapidly in Taiwan, the Philippines, the Malay States, Japan, India and other areas. Virus sent to this country for antigenic analyses were found to be type A, but antigenically different from any previously known A strains in the hemoagglutination inhibition test. Animal anti-sera prepared against type A strains did not inhibit or neutralize the new variant and no protective antibody could be demonstrated in sera from human beings repeatedly vaccinated with previously prevalent type A virus.

Information to date suggests that little protection against the new virus is gained by previous vaccination with existing influenza vaccine.

Beginning June 2 a series of influenza out-

breaks were reported among ships which had been berthed in Narragansett Bay, Newport, R. I.

Spread of the epidemic was erratic. Subsequent infections have been reported in San Diego, Monterey, Davis and San Francisco, Calif.; Cleveland, Ohio; Lexington, Ky.; Valley Forge, Pa.; Salt Lake City, and Grinnell, Iowa.

Clinical and Public Health Aspects

The experience in Asia and in the United States provides no basis for predicting an increase in severity of infection in the coming fall and winter or during the next year or two. The present concern arises largely from the possibility that a more virulent variety of the Asian type may emerge. The severity of the 1918 epidemic is believed to have been due to some mutation which exposed the population to a virus or viruses radically different antigenically from those strains to which they had been previously exposed.

Influenza is usually characterized by abrupt onset, prostration, fever up to 104, headache, myalgia, cough and sore throat. X-ray examinations of the chest usually show no abnormal findings. Leukopenia is common in uncomplicated cases. The febrile period usually lasts 3 to 5 days, following which the patient may complain of extreme weakness for several more days.

In laboratory diagnosis of individual cases, the virus may be isolated from secretions of the nose and throat early in the course of the illness. The procedure consists of inoculating chicken eggs which have been incubated for

* Surgeon General, U. S. Public Health Service, Dept. of HEW.

about ten days, and recovering the virus in the fluids of the embryonic sac.

Paired specimens of blood, one taken in the acute phase and the other 10 days to two weeks later, may be used for serological tests. A four-fold or greater rise in antibody titer is regarded as an indication of influenza infection. Since neither of these laboratory procedures can be completed while the patient is still acutely ill, they are of little value to the physician in prescribing treatment. Such tests are necessary, however, to confirm the presence or absence of influenza in a community.

Immunological Aspects

Studies in the military reveal that a properly conditioned vaccine is 70 per cent effective under epidemic conditions and that reactions to the vaccine are quite rare. Individuals known to be sensitive to egg are **not** given the vaccine since virus is grown in embryonated eggs.

The manufacturers of vaccines are able to produce a satisfactory monovalent vaccine (containing the Asian strain) in sufficient quantity for civilian use this winter. They are currently working on a large-scale production basis.

Present Considerations

Isolation of causative virus has been made prior to the appearance of influenza in the United States; thus for the first time in history we are in the fortunate position of being ahead of an impending epidemic of influenza. It seems probable that influenza will continue to spread for the remainder of the summer months but will not be highly epidemic in this country until fall or winter when outbreaks may be anticipated. While the disease will probably be mild there is always the outside possibility of a repeat of the 1918 epidemic. There is a further possibility that the virulence of the infection as reflected in case-mortality rates will increase. Even though these are still only possibilities, any preparations which need to be done to meet these eventualities must be accomplished now. After a pandemic starts it will be too late.

At the invitation of the WHO, a plan for investigation of influenza outbreaks in foreign countries has been developed by the influenza commission of the Armed Forces Epidemiological Board. Teams making the

studies will be particularly interested in determining (a) the properties of the virus, (b) complete clinical descriptions, (c) whether a bacterial component is associated with the illness, and (d) epidemiologic aspects.

The American Medical Association has already announced a program designed to offset the severe strain placed on medical personnel when so many people suddenly become ill.

Finally, in recent years the nature of influenza in this country has not warranted the use of influenza vaccine except on a group basis to minimize absenteeism or in so called priority groups. However, the present influenza epidemic, with its rapidity of spread and high attack rate is sufficiently unusual to press for immunization against the new strain of influenza virus. As a properly constituted vaccine is the only preventive for this disease, the Public Health Service with the Association of State and Territorial Health Officers and the American Medical Association plans to promote the use of the vaccine as soon as it becomes available. To accomplish this we plan to embark upon an educational and promotional campaign to encourage all persons who want it to seek influenza vaccine on a voluntary basis. An such campaign must be conducted in an orderly fashion to avoid confusion and hysteria in the public and will call for the combined efforts of all of us.

SUMMARY

1. Influenza has been known for centuries under a variety of names but except for the pandemic of 1918, the illness was regarded lightly.

2. For the past twenty-five years it has been possible to incriminate certain strains of Type A virus and Type B virus as causative agents of cyclic outbreaks of influenza.

3. The current epidemic in the Far East and sporadic outbreaks in the United States and elsewhere are caused by a new strain of Type A virus popularly known as the Far East strain.

4. There is a distinct probability that the current influenza epidemic will increase and develop into pandemic proportions by late fall or winter. Also there lurks the possibility of an increase in virulence of the infection as reflected in case-mortality rates.

5. A properly constituted vaccine containing the new strain of Type A virus represents the only preventive tool at our command.

6. Influenza vaccines have been proven effective and safe in controlled studies conducted by the military.

7. The Public Health Service, in cooperation with the State and Territorial Health Officers and the American Medical Association will stimulate and promote a nationwide voluntary program of vaccination against the prevalent strain of influenza.

INSTITUTE APPEALS FOR HISTORICAL PHOTOS OF PHARMACY

An appeal for historical photographs of pharmacy in action has been issued by the American Institute of the History of Pharmacy.

"Many valuable pictures of important men and significant events in American pharmacy are being thrown into wastebaskets across the country," Glenn Sonnedecker, Director of the Institute, maintains. "Among these 'important men' we must include the average practitioner of a former time, pictured at his work in a community pharmacy, a hospital, or manufacturing laboratory. We are becoming more aware of the losses," he explained, "as we discover time and again that useful pictures have been lost, discarded, or damaged."

The American Institute of the History of Pharmacy urges every pharmacist "to find out what is in his files, or perhaps in a basement box or attic trunk, that should be publicly preserved to help future generations of pharmacists understand their professional heritage and their predecessors." In this new effort, the Institute is following up a suggestion made earlier in the year by George Bender of Detroit, current president of the A.I.H.P., who called for more systematic efforts to get irreplaceable historical material safely into the Institute's reference collections.

The Institute offers several suggestions to pharmacists who want to cooperate and thus make sure that pharmaceutical pictures or other records are not destroyed later by someone who does not understand their historical value:

1. Send pictures for permanent and public preservation to the American Institute of the History of Pharmacy, Chemistry Building, Madison 6, Wisconsin, or other suitable depository. All pictures and other historical documents deposited will remain identified with the name of the donor.
2. Identify and date each picture as precisely as possible, indicating any guesses clearly. Never write on the back of photographs. Identification or description should be typed on a separate sheet of paper.

3. If you hold old photographs that may be valuable, or if you know of such photographs held by others, a letter of inquiry or information addressed to the Institute would be appreciated. If there are pictures of special significance that cannot be deposited, the Institute often obtain copies or records their existence and location.

Dr. Sonnedecker observed that "a picture is not necessarily 'worth more than ten thousand words', or even ten words, but the pictorial record is unique and cannot be replaced entirely by graphic description, however vivid the writing."

THE SOUTH DAKOTA PRESCRIPTION SURVEY, 1956—

(Continued from Page 426)

brought out earlier in this paper and remembering that compounded prescriptions take longer to fill, it is reasonable to state that over 20% of the prescriptions compounded in South Dakota last year were sold at a loss. A total of 26.8% of the prescriptions compounded were sold at prices up to \$1.00. The average price of all compounded prescriptions was \$1.93.

A comparison of average prices charged for compounded prescriptions according to form of medication is shown in Table VI.

Table VI
PRICES OF COMPOUNDED PRESCRIPTIONS
IN SOUTH DAKOTA, 1956, ACCORDING TO
FORM OF MEDICATION

Form of Medication	Average Price
Liquid	1.82
Capsule	2.18
Ointment	2.10
Bulk Powder	1.23
Divided Powder	2.53
Suppository	2.50
Other	2.09

SUMMARY

The results of a study of prescription income and other economic characteristics of South Dakota pharmacies during 1956 is presented. Also, an ingredient analysis of 9,841 prescriptions filled in South Dakota pharmacies during selected periods of 1956 is reported. The average figures presented can be used as a basis for comparison of individual prescription department operation. They may also be used for comparison with future surveys in order to determine prescribing trends and the status of pharmacy in South Dakota.

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3. Howard, M. E., "Modern Drug Encyclopedia and Therapeutic Index," 6th Ed., (New York, Drug Publications, Inc., 1955).
4. Kastrop, E. K., "Facts and Comparisons," (St. Louis, Facts and Comparisons, Inc., 1957).
5. *American Druggist*, 135, 49, (1956).



RECENT PHARMACEUTICAL *Specialties*

ENOVID TABLETS

Description: Coral colored, uncoated, scored tablets containing 10 mg. of 17-ethynyl-17-hydroxy-5(10)-estren-3-one with 0.15 mg. of ethynyl-estradiol 3-methyl ether in each.

Indications: Enovid principally stimulates the endometrium to a luteal phase and is indicated in the following menstrual disorders: primary and secondary amenorrhea, menorrhagia, metrorrhagia, oligomenorrhea, inadequate luteal phase, dysmenorrhea and premenstrual tension. Enovid-treated cycles may be anovulatory if treatment is begun before the fifteenth day of the cycle, and the first post-therapy cycle may be prolonged for a few days.

Dosage: This differs for some of the various indications but essentially treatment is given for three consecutive cycles: one tablet of 10 mg. from day 5 to day 25 of the is given for twenty days to establish the cycle, except in amenorrhea when Enovid first cycle, in metrorrhagia for ten days to establish the cycle and if ovulation is desired therapy should be begun on day 15 instead of day 5 of the cycle. If nausea should occur the daily dosage may be decreased to half or given in divided doses for three days and then back to full dosage. Intermenstrual spotting, evidence of inadequate dosage, may be controlled by increasing the daily dosage by 10 mg.

Dosage form: Bottles of 50 tablets, cost to pharmacist \$16.20.

Source: G. D. Searle & Co.

LIQUID TRISOGEL

Description: An aromatized suspension of aluminum hydroxide and magnesium trisilicate.

Indications: For use as adjunctive therapy in the treatment of peptic ulcer and for di-

gestive disturbances associated with gastric hyperacidity.

Liquid Trisogel is "palatable-ized" for maximum patient acceptance.

1. Prompt antacid effect of aluminum hydroxide plus the more sustained neutralizing properties of magnesium trisilicate.
2. Each 5 cc. (approx. 1 teaspoonful) will neutralize 100 cc. of 0.1 N HCl.
3. Rapid, efficient action assured by liquid formula.
4. No predisposition to constipation—magnesium trisilicate counteracts possible constipating effects of aluminum hydroxide.
5. A nonsystemic antacid that precludes development of alkalosis.

Dosage: In peptic ulcer, the usual adult dose is 1 to 2 tablespoonfuls every one to three hours. In gastric hyperacidity, the dosage 2 or more teaspoonfuls as needed.

Dosage Form: 12-oz. bottles.

Source: Eli Lilly and Co.

PHOSPHATABS

A swift and simple alkaline phosphatase test has recently been made available to hospitals and physicians by the Laboratory Supply Division of Warner-Chilcott Laboratories. The testing material, called Phosphatabs, will come in kits sufficient for forty-eight tests. No special equipment, other than a centrifuge is required for the new, rapid test.

Alkaline phosphatase is an enzyme which is concentrated in liver and bone tissue. It is discharged into the blood in excessive quantities when these tissues are damaged, so that its level in the blood serum can be measured.

Heretofore alkaline phosphatase tests, used in the diagnosis of cancer, jaundice, and other diseases of the liver and skeleton, required the facilities and skills of a well-equipped and

well-manned laboratory; the test also traditionally took several hours to perform.

The Phosphatab test requires no special laboratory equipment, can be completed in 12 to 31 minutes, and is so simple it can be taught in a few minutes to an office nurse or mental hospital attendant, according to Raphael Cohen, Manager of Warner-Chilcott's Laboratory Supply Division.

The test involves crushing of a reagent tablet in a few drops of serum in a special test tube which is part of the kit. The mixture is let stand 12 to 30 minutes, depending on room temperature, after which a drop of color developer is added. A color chart, also part of the kit, provides comparisons and indices for preliminary diagnosis.

Dr. Paul L. Wermer, Warner-Chilcott medical director, pointed out that "Phosphatabs enable the small hospital to screen for abnormal alkaline phosphatase blood levels for the first time.

"Moreover," he added, "routine screening of all patients on admission is now possible. The Phosphatab test can screen out the vast number of normal sera specimens, and avoid time consuming, complex tests.

"The great value of the new test, however, is that it will give the general practitioner an opportunity to test for suspected early bone, pancreatic or liver cancer and, especially, stones in the common bile duct of the liver."

Another major use foreseen by Dr. Wermer is in mental hospitals where frequent alkaline phosphatase tests are now recommended to discover early cases of liver damage from use of large doses of tranquilizers.

Another additional use already surveyed for the new test is as a supplement to x-ray identification of cancer that may have spread from its original site to the liver where radiological evaluation of x-ray shadows is difficult.

Gastroenterologists and surgeons will find the test valuable after gall-bladder surgery to check on the formation of common-duct stones.

All the material necessary for forty-eight tests will be packed in each Phosphatab kit, according to Mr. Cohen. Phosphatabs will be marketed through laboratory supply distributors.

ADRESTAT

Description: Each capsule and lozenge con-

tains 2.5 mg. of adrenochrome semicarbazone (present as 65.0 mg. carbazochrome salicylate), 5 mg. sodium menadiol diphosphate (vitamin K analogue), 50 mg. purified hesperidin, and 100 mg. vitamin C. The injectable form, Adrestat (F), contains in each 1-cc ampul 5 mg. of adrenochrome semicarbazone (available as 130.0 mg. carbazochrome salicylate).

Indications: Adrestat is indicated in virtually every bleeding condition and operative procedure, including epistaxis, nasopharyngeal surgery, dental surgery, uterine bleeding, and hypoprothrombinemia.

Adrenochrome semicarbazone has proved to be invaluable in promoting retraction of severed capillary ends and increasing capillary resistance to trauma. The bioflavonoids act synergistically to strengthen capillaries and to correct or prevent abnormal capillary fragility and permeability. Sodium menadiol diphosphate (vitamin K analogue) has been included in the Adrestat formula as an acid in the restoration and maintenance of normal prothrombin levels.

Dosage: Adrestat capsules and lozenges should be taken three times a day for five days preceding and five days following surgery. Prior to surgery 1-cc of Adrestat (F), the injectable form, is given and may be continued every two hours until bleeding is controlled. There are no contraindications to the use of Adrestat nor are there any cumulative effects.

Dosage Forms: Adrestat capsules — boxes of 30, Adrestat lozenges — boxes of 20, and Adrestat (F) — boxes of five 1-cc ampuls.

Source: Organon Inc.

ROMILAR CF

Description: Romilar CF (Cold Formula) is a multiple-action formula for the symptomatic relief of colds and acute upper respiratory disorders.

Each teaspoonful (5 cc) of the pleasantly flavored syrup provides: 15 mg. of Romilar Hydrobromide (antitussive), 1.25 mg. of chlorpheniramine maleate (antihistamine), 5 mg. of phenylephrine hydrochloride (decongestant), and 120 mg. of N-acetyl-p-aminophenol (analgesic-antipyretic).

Indications: The additive action of the components of Romilar CF offers maximum relief of the most frequently encountered symptoms of acute upper respiratory dis-

orders, such as cough, excessive secretions, nasal and bronchial congestion, headache, myalgia and fever.

Romilar CF is non-narcotic and does not cause constipation.

Dosage: The recommended dosage of Romilar CF is: Adults and children over 8 years — 1 to 2 teaspoonfuls, every four hours. Younger children — $\frac{1}{4}$ to 1 teaspoonful, every four hours, according to age.

Dosage Form: It is available in 16-ounce and one-gallon bottles.

Source: Hoffmann-LaRoche.

OIL RETENTION ENEMA (Fleet)

Description: Offered by Fleet as a companion item to the Fleet Enema Disposable Unit. Hand size, ready to use plastic "squeeze bottle" contains 135 cc. Mineral Oil U.S.P. Attached non-traumatic rectal tube is pre-lubricated and protected by a readily removable plastic cover.

Indication: Oil Retention Enema (Fleet) is used to relieve fecal impactions, postsurgically, or as the physician may direct.

Dosage: Adults, entire contents of one Oil Retention Enema unit; infants and children, one-quarter to one-half adult dose; or as directed by physician.

Dosage Form: In single use, plastic "squeeze bottle" with attached pre-lubricated rectal tube, individually packaged. Packed four dozen, 4½ oz. dispensers to case.

Source: C. B. Fleet Co., Inc.

COMPAZINE SPANSULE CAPSULES

Description: Sustained release capsules containing the tranquilizer-antiemetic compazine (prochlorperazine, S.K.F.) in two strengths, 10 mg. and 15 mg.

Indications: 1. Mental and emotional disturbances — mild and moderate — whether occurring alone or in association with somatic conditions. Used successfully in anxiety, agitation, agitated depression, tension, confusion, restlessness, senile agitation and postalcoholic states.

2. Nausea and vomiting—mild and severe—of widely varying causes, with dramatic results in severe and refractory cases. Particularly effective in the nausea and vomiting of pregnancy. In the ordinary vomiting of the first trimester, one Compazine Spansule capsule taken before retiring provides antiemetic protection throughout the night and into the morning, thus protecting

against "morning sickness."

Compazine Ampuls are available for use in severe nausea and vomiting when oral administration is not feasible.

Dosage: Most patients respond well to one Compazine Spansule capsule (10 mg. or 15 mg.) taken upon arising. If necessary, the morning dose may be repeated in the late afternoon or in the evening to insure uninterrupted, round-the-clock protection. In some patients it may be necessary to increase the dosage — for example, to two 10 mg. Compazine Spansule capsules twice daily. An occasional case may require dosages that exceed 40 mg. per day.

In the "morning sickness" of pregnancy: One Compazine Spansule capsule (10 mg. or 15 mg.) taken before retiring affords antiemetic activity throughout the night and into the morning, thus protecting against "morning sickness." When necessary, a second Compazine Spansule capsule may be taken in the morning for protection the rest of the day.

Children's dosage: For control of nausea and vomiting, children (6 to 12 years of age) should receive one Compazine Spansule capsule (10 mg.) in the morning. This dosage may be repeated in the evening if necessary. The total dose for children should not exceed 25 mg. in 24 hours. For ease of administration, a capsule may be opened and its contents mixed with a spoonful of cool food (applesauce, custard, rice pudding, etc.).

Note: Both the 10 mg. and the 15 mg. Compazine Spansule capsules have the same duration of action; they differ only in intensity of effect.

Cautions and Contraindications: Although no clinical evidence of liver involvement or blood dyscrasia attributable to the drug has been reported in more than 500,000 patients treated with Compazine the physician administering the drug should remain alert to the possible occurrence of blood dyscrasia or other toxic manifestations which have been reported occasionally with some phenothiazine compounds.

As dosage is raised above the recommended range, there is a possibility that extrapyramidal symptoms may occur. If extrapyramidal symptoms appear, they may readily be controlled either by a downward adjustment of dosage, by the concomitant

administration of an anti-Parkinsonian drug, or by the temporary withdrawal of Compazine.

It should be noted that the antiemetic action of Compazine may mask signs of overdosage of toxic drugs, or may obscure the diagnosis of conditions such as intestinal obstruction and brain tumor.

The potentiating action of Compazine is not as great as that of Thorazine (chlorpromazine, S.K.F.). However, if depressant agents (opiates, barbiturates, etc.) are used in conjunction with Compazine, their amount should usually be reduced by one-half or less.

Compazine is contraindicated in comatose or greatly depressed states due to central nervous system depressants.

The possibility that an occasional patient may experience mild drowsiness when first taking Compazine should be kept in mind, and patients should be cautioned about operating automobiles, etc.

Dosage Forms: 10 mg. Compazine Spansule capsules (1 dot on capsule), each containing prochlorperazine, S.K.F., 10 mg., as the dimaleate, in bottles of 30 and 250.

15 mg. Compazine Spansule capsules (2 dots on capsule), each containing prochlorperazine, S.K.F., 15 mg., as the dimaleate, in bottles of 30 and 250.

Also available: 5 mg. and 10 mg. tablets (as the dimaleate), in bottles of 50 and 500. 10 mg. (2 cc.) ampuls (as the ethane disulfonate), in boxes of 6 and 100.

Source: Smith, Kline & French Laboratories.

SYNKAYVITE

Description: Synkayvite Roche (water-soluble vitamin-K analog) is now available in two new dosage forms: 1 mg. and 2.5 mg.

Indications: The new strengths, designed for administration to the infant immediately after birth, conform to the current trend toward the use of lower doses of vitamin K for the prevention of neonatal hemorrhage.

Synkayvite is also useful in preventing hypoprothrombinemia of the newborn when given parenterally to the mother up to two hours before delivery. For this method of administration, the established dosage of 5 mg. to 10 mg. is recommended.

Other indications for Synkayvite include diseases interfering with the normal ab-

sorption and utilization of natural vitamin K from the gastrointestinal tract. It is also useful in the prevention of hemorrhage in biliary and gastrointestinal surgery and as a dicumarol antagonist.

In addition to the new strengths, Skykayvite is available in ampuls of 5, 10 and 75 mg., as well as in 5 mg. oral tablets.

Source: Roche Laboratories.

RELEASIN PRICE REDUCTION

A second major reduction in the price of Releasin, a hormone of pregnancy, was announced today by Warner-Chilcott Laboratories of Morris Plains, New Jersey.

At term, Releasin causes the cervix of the uterus to soften, thus facilitating dilatation and making labor and delivery both easier and less painful. Before term, its use has been reported to arrest premature labor.

The drug, which is obtained from the ovaries of pregnant sows, was introduced, in July, 1956, for use in premature labor. At that time, the recommended dose of seven one-subic centimeter ampules cost the patient \$175. On June 11, after improvement in extraction had increased the yield, the price was reduced to \$15 per one-cubic centimeter ampule. Today's reduction, the result of further refinements in production, brings the cost of the drug down to \$8.65 per one-cubic centimeter ampule.

The extent of the reduction in cost is explained by Dr. Paul L. Wermer, medical director of Warner-Chilcott, a division of Warner-Lambert Pharmaceutical Company. "We have learned," he said, "that the original recommended dosage was ultraconservative. It is possible to achieve good results, particularly in first-baby labor and in difficult labor, at term, with as little as three-cubic centimeter ampules of Releasin."

The value of the drug, in difficult labor at term, was reported in the earliest hospital trials. Two groups of scientists, at New York Medical College and Flower Fifth Avenue Hospitals, and at Cleveland State, St. Ann, and Mt. Sinai Hospitals in Cleveland reported, more than a year ago, on the use of Releasin in premature labor and also recorded its successful use in labor at term.

In such cases, the reports agreed, injections of Releasin were followed by a period of rest, then relatively quick and painless labor ending in normal delivery.



Scientific PAPER

IMMEDIATE ETIOLOGIC DIAGNOSIS IN THE CONVULSING PATIENT

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A physician is frequently called to see a patient who has already had a "fit"; much less frequently does he actually witness the attack. Though many authors state that the etiologic diagnosis is most easily made when the convulsion is actually seen, one still finds himself without a diagnosis on occasion. Since there is often a period of areflexia and/or loss of consciousness following the convulsion, the apparent urgency for diagnosis and treatment is intensified.

A convulsion is a single symptom which may occur in a wide variety of disease states, but it in no way indicates a common etiology. Certain advantages are to be gained from the consideration of convulsions themselves. They constitute a serious, dramatic and troublesome symptom in addition to any other signs or symptoms which are characteristic of a particular associated disease. If the seizures appear to be temporary or self limited and this early impression is confirmed by the passage of time a diagnosis of convulsion secondary to some medical entity is justifiable. If the tendency is toward chronic recurrence of seizures and specific self limited neurological diseases can be eliminated, then the problem probably belongs in the realm of epilepsy.

A given convulsive seizure has its origin in the central nervous system. Since the processes which give rise to this discharge resulting in the convulsive seizure are extrem-

ely variable, one must classify or categorize his information in order to proceed with his differential diagnosis and thus institute specific therapy when it is available. Almost every physician, therefore, develops a "Routine" which allows him systematically to rule out the improbable and arrive at the most likely diagnosis. The approach varies depending on his training, experience and somewhat upon the type of practice he does. Certain diagnostic tools are available only to certain specialists. The neurosurgeon relies daily on pneumoencephalography, ventriculography and arteriography, while a given neurologist may be particularly adept in the use and application of caloric testing and electroencephalography. All physicians, regardless of their station in medical practice, have the major diagnostic tools at their command. By the simple addition of the awareness of a specific diagnostic possibility to fit the findings obtained from a **careful history** and **physical examination**, many otherwise obscure causes for convulsive seizures may be determined with surprising accuracy. Some ordinary "medical bag" diagnostic instruments which needlessly gather dust in a remote corner of the medical kit are the pocket flashlight and the ophthalmoscope. I should like to emphasize how the routine use of these instruments will increase diagnostic efficiency and accuracy in any physician's practice. The information obtained

with these two instruments often provides on the spot information obtainable in no other way, or, at best, only after many time consuming laboratory procedures resulting in critical delay of specific therapy. When positive signs are noted on or in the eye, the confirmatory diagnostic workup can be much more directly and accurately carried out.

To label a patient epileptic is totally unfair to all concerned unless every remediable diagnostic entity has been carefully and thoroughly ruled out. Since we admit that most convulsive seizures have their origin in disturbed pathophysiology of the central nervous system, it seems logical to begin our classification with an observation of the general types of convulsive seizures in relation to the region of the nervous system from which they arise. For instance, if there is an aura and the seizure has a persistent local or focal character, then a careful search for a local lesion in the cortical area of the brain is essential. The lack of conscious premonitory warning of migratory or generalized seizures suggests a large list of extraneural systemic disturbances which generally affect the sub-cortical centers. Seizures which last longer than twenty or thirty minutes are most likely to have their source in some pathological condition in the brain. The epileptic and simple febrile seizures seldom last longer than three minutes. One can usually obtain concrete information regarding the general type of convulsion and its duration, even from an emotionally disturbed lay observer.

EVIDENCE OF BRAIN TRAUMA

There can be no doubt concerning the importance of brain injury in the causation of many convulsive seizures. Some physicians believe that this background exists in all patients with convulsions, but certainly, evidence for this is far from convincing. As a result of widespread clinical experience and investigation, neurosurgeons¹ have pretty well proved that brain damage causes convulsions not because of the resultant area of scar tissue, cyst or other deformity, but because the damaged area interferes with the function of nerve cells in the adjacent areas causing them to be hyperirritable and subject to explosive discharge. Dead nerve cells and

glial (scar) tissue which replace them cannot react in this manner.

The exact statistical effect of prematurity in this regard is not known. However, congenital malformations do explain a certain number of neurological abnormalities producing symptoms beginning at birth and extending over the first decade or more. The distinction between genetic and acquired anomalies of structure is not well understood. Formerly nearly all developmental defects were considered to be caused by errors or anomalies in the germ plasm. However, Gregg² and others in 1941 and since described numerous widespread developmental defects of heart, brain, eyes and other organs in children whose mothers had had rubella during the first trimester of pregnancy. Subsequently, in 1943, Warkany and Schraffenberger³ showed that a female rat receiving a diet deficient in riboflavin during the early days of gestation gave birth to young having extreme and varied anatomical defects of a type formerly called developmental anomalies. Albanese, et. al.⁴ in the same year showed that amino acid (tryptophane) deficient rats were capable of pregnancy but before the time of delivery, the fetus would die and be resorbed. Resorption of the fetus in the rat is comparable to abortion in the human being. A greater number of entities diagnosed in the past as congenital anomalies can now be shown to be due to injury to the fetus during specific periods of growth, and are not inherent deficiencies in the germ plasm.

Just as the transplacental passage of the virus of rubella results in congenital cataract, so also, can the fetus be infected with protozoan, *Toxoplasma* and the *Spirochaete* of syphilis. Congenital toxoplasmosis is suggested in infants having convulsions diarrhea and unusually poor vision in whom hydrocephalus is associated with cerebral cal-

1. Penfield, W., and Erickson, T. C.: "Epilepsy and Cerebral Localization," Chap. 5, pp. 194. Charles C. Thomas, Publisher, Baltimore, 1944.

2. Gregg, N. M.: Congenital cataract following German measles in mother, *Tr. Ophth. Soc. Australia* (1941) 3:35-46, 1942.

3. Warkany, J. and Schraffenberger, E.: Congenital malformations induced in rats by maternal nutritional deficiency; effects of purified diet lacking in riboflavin, *Proc. Soc. Exper. Biol. & Med.* 54: 92-94, (Oct.) 1943.

4. Albanese, A. A., Randall, R. M., and Holt, L. E., Jr.: The effect of tryptophane deficiency on reproduction, *Science*, 97: 312-313, (Apr.) 1943.

cifications and chorioretinitis in both eyes most commonly involving the macular area. The ocular fundus lesions may appear healed at birth.

Patients with congenital syphilis are still with us though in smaller and smaller numbers. This disease is so protean in its nature that convulsive seizures may not be statistically important. A sufficient number of cases are due to this cause that one should remember to look for evidences of active or healed interstitial keratitis, the stippled disturbed generalized pigmentation of the posterior pole (Pepper and Salt Fundus) and/or the frank multicentric healed focal anterior choroiditis. The stippled change is usually bilateral, while the focal anterior choroidal changes are likely to be unilateral and in an eye which may also show evidences of interstitial corneal disease. In the acquired form of the disease, of course, the findings of the Argyll Robertson pupil may give a helpful lead in a patient with an otherwise obscure brain stem complex associated with convulsions.

AGE OF PATIENT

Consciously or unconsciously, every physician uses the age of the patient to help direct his early diagnostic considerations. From one large series Peterman⁵ found 75% of convulsing patients under the age of one month had a definite background of birth trauma or congenital anomaly. Between one and six months of age the proportion fell to twenty-five percent, declining gradually thereafter. Following this very early period in life, a group of background factors becomes more prominent. The most prevalent of these are febrile convulsions, epilepsy and tetany. Tetany was observed by Peterman to occur most commonly after the age of one month but under the age of three years. The greatest frequency of seizures associated with acute infections was below the age of ten years. Only rarely do simple febrile convulsions occur after the age of ten years. The diagnosis of epilepsy was made with increasing frequency as the age advanced to the early twenties. After age thirty-five the incidence of vascular accidents, primary and secondary tumor growth

and degenerative disease is relatively much greater.

FEVER

The presence or absence of fever in a convulsing patient offers another criterion for orientation. In cases of simple febrile convulsions the fever is usually high and has risen very rapidly. In fact, the appearance of the convulsion may be the first thing to bring attention to the patient's fever.

When fever has been present for some time, however, before the convulsion has occurred, some cause in addition to the fever should be sought. Acute brain diseases such as meningitis, encephalitis, brain abscess or cerebritis associated with acute otitis or mastoiditis and cerebral vascular accidents complicating acute infectious diseases are the general possibilities in this instance.

Other causes of convulsions which may or may not be associated with fever are subarachnoid or subdural hemorrhage. Subarachnoid hemorrhage is not too frequently associated with trauma, while the subdural hemorrhage, occurring more commonly in infants before the age of two years, usually follows trauma of some sort. A preretinal hemorrhage, sometimes of large proportions, is not infrequently present with hemorrhage either in the subarachnoid or subdural areas. This finding is not pathognomonic, but is strongly suggestive in patients with convulsions.⁶

C.N.S. DISEASE NOT ASSOCIATED WITH FEVER

When no fever is present one's attention is directed toward cerebral vascular accidents, hypertensive encephalopathy, degenerative diseases of the brain, a group of congenital disorders and brain tumor. It is in this group that the examination of the eye and ocular fundus is so likely to be helpful. It is impossible to outline more than a few of the many circumstances in which this is true, but one should always search carefully for alterations in pupillary size and reaction, the presence of extraocular muscle palsies, presence of proptosis (exophthalmos), alteration in one or both visual fields, presence of opacities in the

5. Peterman, M. G.: Convulsions in childhood, 20 year study of 2,500 cases, *Am. J. Dis Child.* 72:399-410, (Oct.) 1946.

6. Smith, D. C., Kearns, T. P., and Sayre, G. P.: Preretinal and optic nerve-sheath hemorrhage; pathologic and experimental aspects in subarachnoid hemorrhage, *Tr. Am. Acad. Ophth.* 61: 201-211 (Mar.-Apr.) 1957.

ocular media (cornea, lens and vitreous), and focal pathology of the optic nerve, macula or retinal vascular tree. The diagnosis is frequently accurately made by findings in this area when all other symptoms and signs still point to no specific etiology for the patients convulsive seizure.

Ganglion cells are components of the cerebral cortex and are also found in the retina being particularly concentrated in the macular and paramacular zone. Degenerative changes in these cells produce a group of clinical entities known as Cerebromacular Degenerations. More commonly in members of the Jewish race these occur well before the end of the first year of life with numerous clinical signs of lack of proper development and then signs of visual failure. As the disease progresses, regression surpasses retardation and in a few months blindness, dementia and helplessness complete the picture. The ophthalmoscopic findings of a patch of degenerative and edematous retina in the center of which is a red (foveal) zone of choroidal vascular reflex (Cherry Red Spot) makes the diagnosis of Anaurotic Family Idiocy. Nearly all of the types of myelin degenerative disease may, on occasion, produce ocular signs and symptoms. Neuromyelitis Optica (Devic's Disease), demonstrates bilateral optic nerve involvement, while Multiple Sclerosis may, indeed, be ushered in by an initial episode of optic neuritis or retrobulbar neuritis, with sudden profound reduction in the central visual acuity. Another member of this group of diseases known as Schilder's Disease (Encephalitis Periaxialis Diffusa), resulting from softening and cavitation in the subcortical white matter, is manifest often by the presence of "Cortical Blindness" (retention of pupillary reflexes) and occasionally by convulsive seizures depending upon the site and size of the cerebral lesions.

The basal ganglia are the site of the pathology in Hepatolenticular Degeneration of Wilson, which is a progressive familial disorder occasionally associated with convulsions and a gray-green to olive colored ring of pigmentation inside the limbus of each cornea, (Kayser-Fleischer Ring), is diagnostic.

Epileptic like seizures in a patient showing adenoma sebaceum of the face particularly with evidence of mental retardation should

prompt a careful ocular examination, since a certain percentage of patients with tuberous sclerosis have a characteristic mulberry shaped grayish-white anterior retinal lesion. It is more often situated at the posterior pole of the eye near the optic nerve and is diagnostic when seen.

A convulsive seizure is a symptom occasionally observed in patients suffering from von Hippel-Lindau's disease where angiomatosis seen in the retina of one or both eyes coexists with similar lesions in the cerebellum.

Pigmentary degeneration of the retina (Retinitis Pigmentosa) is seen in association with obesity, mental retardation, sexual infantilism and polydactylism in the syndrome of Laurence-Moom-Biedl-Bardet. These patients occasionally have convulsions as well.

Undiagnosed primary malignancy may give rise to one of a shower of metastatic growths in the choroid of the eye where the resultant retinal separation and elevation is easily seen in the ophthalmoscopic examination and is usually manifested by loss of vision on the part of the patient. A similar growth in the C.N.S. may well be the excitatory focus for an observed focal convulsive seizure.

The finding of a swollen (edematous) nerve head in one or both eyes suggests several easy to perform diagnostic procedures to help determine the locale of the responsible pathologic process. To determine if the process is situated in the optic nerve or in the central nervous system, the visual acuity should be determined with a Snellen test chart or comparable device. Where there is profound visual loss it is likely that the disease process is in the optic nerve, while papilledema from increased intracranial pressure more commonly fails to change the patients central visual acuity. Gross visual field testing can be easily and rather accurately carried out by the simple confrontation technique; definite helpful positive or negative information can be obtained in this fashion.

The finding of a cloudy (edematous) cornea and a red eye with a fixed dilated pupil in a patient who has convulsed following an episode of nausea and vomiting would certainly suggest the need for determining the ocular pressure. This can be done with the fingers by comparing the involved eye with its fellow. Cases of acute glaucoma often reach the

stage of alkalosis from protracted vomiting and demonstrate clinical tetany. Less commonly, this occurs in patients who have an acute exacerbation of chronic glaucoma. In this case, clearing of the cornea with a drop or two of glycerin will allow the observation of a pathologically excavated nerve head which may also exist in the fellow eye.

Bilateral proptosis (exophthalmos) should prompt one to look for signs of thyroid surgery in the neck and suggest a careful evaluation of the crystalline lens of the eye for signs of early cataract seen in hypoparathyroidism with resultant tetany.

Hyperinsulinism commonly associated with loss of memory and disorientation obviates immediate historical help from the patient who has convulsed, but the finding of retinal microaneurysms and/or edema residues in an ophthalmoscopic examination gives immediate and therapeutically useful information in a diabetic of long standing. The pupils are frequently dilated as well, and this allows an unobstructed view of the fundus.

The classical findings of superficial flame

shaped hemorrhages and fluffy edema patches associated with profound alteration of the usual calibre of retinal arterioles might suggest hypertensive encephalopathy or eclampsia associated with extreme renal insufficiency as the cause of an otherwise obscure type of convulsive seizure.

Bleeding from cerebral aneurysms or the manifestations of some other abnormal arteriovenous communication responsible for a minor or major convulsion is often manifest first and foremost in ocular changes. Here the presence of a pulsating or non-pulsating exophthalmos may be associated with markedly dilated venous channels in the conjunctiva. It is one of the causes of cyanosis retinae. Auscultation of the eye and orbit for bruit and other confirmatory tests can quickly follow this key observation.

* * *

SUMMARY

Some of the ocular aids to etiologic physical diagnosis of convulsive disorders are presented. Specific ocular findings in some of the peripheral and central nervous system diseases as well as extraneural disorders and congenital anomalies responsible for convulsions are outlined.

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PRESENT STATUS OF CHEMOTHERAPY IN TUBERCULOSIS

Report of Committee on Chemotherapy and
Antibiotics
American College of Chest Physicians

As in previous years this report is not intended as a detailed treatise for chemotherapy of tuberculosis, but rather as a progress report or statement on currently accepted principles and practice to serve as a guide to the physician treating tuberculosis.

General Considerations

At this writing there is no generally accepted optimum regimen in the chemotherapy of pulmonary tuberculosis. Streptomycin (SM), aminosalicylic (PAS) formerly para-aminosalicylic acid, USP XIV, and isoniazid (INH) are the three most commonly used drugs, but there is no unanimity of opinion as to which combination of these is most effective. However, it is emphasized that the best results are obtained when two or more drugs are combined and given continuously for a prolonged period of time. In general, it is probably unwise ever to treat a case of clinically active tuberculosis with one drug alone unless other drugs are contraindicated. Chemotherapy should be given for at least a year even in minimal cases and in advanced cases for a total of 18 to 24 months or at least until the stage of inactive disease is reached.

Recommended Regimens: Though there is no generally accepted optimum chemotherapy regimen for pulmonary tuberculosis at the present time recent reports of the Veterans Administration — Armed Forces Group and of U. S. Public Health Service sponsored studies indicate that the following regimens give approximately the same clinical results in most cases of tuberculosis: (1) Isoniazid, 300 mg. daily plus PAS 12 gm. daily; (2) Isoniazid 300 mg. daily plus SM 1 gm. twice weekly, and (3) Isoniazid 300 mg. daily plus SM 1 gm. twice weekly plus PAS 12 gm. daily. The Veterans Administration and U. S. Public Health Service studies indicate that the regimen of streptomycin 1 gm. twice weekly and PAS 12 gm. daily is not quite the equal of the other three regimens, and that in far advanced disease with large cavities INH-PAS is superior to intermittent SM-INH.

Acute Miliary Tuberculosis

Isoniazid has proved to be very effective in the treatment of miliary tuberculosis with survival rates of 90 per cent and higher being reported. Any standard INH containing combined regimen should be adequate in treating this condition, but due to the serious nature of miliary tuberculosis many still advocate the use of triple drug therapy with higher dosages of isoniazid such as 10 mg. per kg. per day being used. The drug therapy should be continued for at least 18 months.

Tuberculous Meningitis

Reports during the past several years indicate that survival rates of 80 per cent to 90 per cent or higher are possible in tuberculous meningitis when INH, SM and PAS are administered for a minimum of 24 months. The Committee suggests a dosage schedule similar to that for miliary tuberculosis. Intrathecal medication is not recommended. It is of the utmost importance to start the treatment immediately if the history, physical examination or spinal fluid findings strongly suggest a diagnosis of tuberculous meningitis. If the patient's condition does not permit oral medication, the INH and PAS may be given parenterally, initially.

Genitourinary Tuberculosis

Genitourinary tuberculosis responds very well to combined drug therapy including INH, SM and PAS in dosage as recommended for pulmonary tuberculosis. The drug should be administered for 18 to 24 months. Recent reports from the Veterans Administration — Armed Forces study indicate that long-term therapy with INH, SM and PAS is very often definitive in such cases and the need for surgical intervention is becoming surprisingly less frequent.

Tuberculosis in Childhood

The Committee recommends that all children with active primary tuberculosis should receive antimicrobial therapy. The complications such as miliary and meningeal tuberculosis which sometimes occur in primary di-

sease have sharply declined since the advent and use of INH. Consideration should be given to the treatment of recent tuberculous converters, particularly in children under four years of age. In children with active tuberculosis, the physician should always be on the alert for the development of miliary or meningeal tuberculosis. The approximate dosages of the antituberculosis drugs for children are as follows: SM 30 to 40 mg./kg. twice weekly, INH 10 to 16 mg./kg./day and PAS 200 mg./kg./day. Children tolerate higher dosages of INH well and administration of pyridoxin is usually not needed to prevent toxicity.

Other Forms of Tuberculosis

When the disease involves such organs and tissues as the larynx, mouth, lymph nodes, trachea, bronchi, GI tract and bone it is best treated by long term combined chemotherapy using one of the regimens recommended for pulmonary tuberculosis.

Tuberculous Pleurisy with Effusion

This condition should be treated as a case of active pulmonary tuberculosis with long term continuous combined chemotherapy for a year or more. This recommendation also applies to the so-called idiopathic pleurisy with effusion patients with a positive Mantoux even though careful studies fail to reveal presence of tubercle bacilli in the pleural fluid. Experience has shown that in such cases the etiology is usually tuberculous and should be treated as such in order to avoid reactivation later.

Steroid Therapy in Tuberculosis

The exact role of cortisone and related compounds in the management of infectious diseases is undefined. However, the greatest difference of opinion regarding the place of steroids exists in the field of tuberculosis. Some have left that this form of therapy is always contraindicated while others have recommended its use under certain specific circumstances. Some of the tissue damage and clinical manifestations in tuberculosis are due to an exaggerated interaction between sensitized tissue and tuberculoprotein. Corticosteroids may suppress this overactive defense mechanism with a resulting decrease in the manifestations of illness. In patients

seriously ill with tuberculosis of long duration there is evidence of adrenocortical hypofunction. Steroid therapy used with concomitant antituberculosis chemotherapy often effects striking symptomatic improvement. Thus, without anticipating any change in the ultimate outcome, the use of steroids would appear to be justified, if only for its symptomatic effect, in patients hopelessly ill with advanced tuberculosis. In acute forms of tuberculosis associated with severe clinical illness, steroids may be helpful. This is especially true of miliary and meningeal tuberculosis. In the latter condition, prevention and relief of cerebrospinal fluid block has been attributed to steroids.

Committee on Chemotherapy and Antibiotics American College of Chest Physicians

G. H. MILLER, M.D. 1871—1957

Dr. G. H. Miller, former Lawrence County coroner and well-known Spearfish physician, died suddenly at his home shortly after supper time Wednesday evening, October 2nd.

Dr. Miller's death was unexpected, as he had been in good health. He was 86 years old.

He was born June 20, 1871 in Conway, Mo. and was a graduate of the medical school in St. Louis, Mo.

Forty years of his 55 years as a practicing physician were spent in Spearfish. He had served as Lawrence County coroner for 15 years, retiring from that position on Jan. 1, 1957.

On June 2, 1926 in Lead, he married the former Agnes Johnson of St. Onge, who survives.

He was a member of the Congregational Church of Spearfish and all Masonic bodies in Spearfish.

In addition to his wife, he is survived by a daughter, Mrs. Marilyn Fluharty, Lemon Grove, Calif., and a son, George Miller, Racine, Wis. Four grandchildren, Danny, Patty, and Susan Fluharty and Kimberly Joan Miller, also survive.

COUNCIL MEETING
Marvin Huggitt Hotel
Huron, South Dakota
September 29, 1957

The September meeting of the Council of the South Dakota State Medical Association was held in Huron, September 29, at the Marvin Huggitt Hotel. The meeting was called to order by Dr. Davidson at 1:00 P.M. The following members answered the roll call: M. M. Morrissey, M.D., A. A. Lampert, M.D., R. A. Buchanan, M.D., C. R. Stoltz, M.D., A. P. Peeke, M.D., A. P. Reding, M.D., E. J. Perry, M.D., for P. V. McCarthy, M.D., J. J. Stransky, M.D., Magni Davidson, M.D., L. C. Askwig, M.D., Paul Hohm, M.D., P. Brogden, M.D., C. J. McDonald, M.D., T. H. Sattler, M.D., J. D. Bailey, M.D., and R. H. Hayes, M.D.

Dr. Stoltz moved that the reading of the minutes of the last meeting be dispensed with as they had been published in the Journal. Dr. Buchanan seconded the motion and it was passed. Mrs. C. R. Stoltz made an announcement for the Women's Auxiliary concerning their assisting in the Essay Contest and also assisting in the distribution of the booklets "What's The Answer." Mr. Foster discussed the distribution of the booklets.

Dr. Lampert reported on the Code of Cooperation between the State Bar and Medical Association. Dr. Peeke moved that the Code be adopted, Dr. Askwig seconded the motion, and it was carried.

Mr. Foster explained the actions taken by the Committee on Indigent Care and read the six principles that he gave to the Legislative Research Council concerning the program. The Committee on Indigent Care recommended that a joint committee be set up between the Medical Association, Pharmaceutical Association, Hospital Association and the County Commissioners to study the problem of Indigent Care so that all parties concerned may participate in the planning. They also recommended that the services of the Medical Association be offered in setting up the medical portion of the program to the Legislative Research Council. Dr. Lampert moved that the Council accept the report and recommendations of the Indigent Care Com-

mittee. Dr. Stoltz seconded the motion and it was carried. Mr. Foster then explained the Federal matching fund program. Dr. Davidson suggested that a letter be sent to the Councilors informing them of the results of the joint meeting.

Mr. John Zimmer, Attorney for the Basic Science Board reported on the progress to date in the investigation of illegal practitioners in the State.

Mr. Foster explained the increase in rates on the Group Life Insurance Program and the suggested plans that have been submitted. He was instructed to explore the possibilities of a split-level premium policy. Dr. Peeke moved that this be done and that a report be made at the January Council meeting. Dr. Hohm seconded the motion and it was carried.

Dr. C. V. Auld of Plankinton was nominated by the Mitchell District Medical Society as General Practitioner of the Year. Dr. Sattler moved that Dr. Auld be the nominee of the South Dakota State Medical Association for General Practitioner of the Year. Dr. Hayes seconded the motion and it was carried.

Dr. Lampert reported on the Blood Banking Seminar held at the University of South Dakota. The following recommendations were made in the report: (1) That workshops be established; (2) That the South Dakota State Medical Association, through its office institute an educational program encouraging participation in the workshop; (3) That the Association President in his travels discuss a Donor Club for physicians and the possibilities of establishing such a club in South Dakota; (4) That the Council authorize an expenditure of \$500.00 to help cover the cost of the workshop. Dr. Lampert moved that the Council accept the report, Dr. Peeke seconded the motion, and it was carried.

Mr. Foster discussed the problem in the State Service to the Blind. Dr. Peeke moved that the recommendation be made to the South Dakota Service to the Blind and to the

Governor of South Dakota that ophthalmologists be utilized in their own areas and that patients should be not sent from their own areas for treatment when equal services are available in their own town, unless they request the services of a specific doctor. Dr. Buchanan seconded that motion and it was carried.

Mr. Foster explained the program of blood testing done by the State Department of Health at the State Fair. Dr. Sattler moved that the Diabetes Committee and the Public Health Committee investigate the facts on the taking of blood sugars and submit the information to the Council. Dr. Reding seconded the motion and it was carried. Dr. Lampert also asked that a resume be made by the Public Health Committee of just what the State Health Department considers to be public health and where their prerogatives end.

Mr. Foster discussed the survey made by the Medical Association office on physicians liability. Dr. Sattler moved that further study be given this question and if a concrete proposal is submitted, it should be submitted to the doctors in the State for consideration. Dr. Reding seconded the motion and it was carried.

A discussion was held on commitment procedures and what revisions would be advisable. Dr. Lampert moved to refer this question to the Mental Health Committee and that the Committee confer with Dr. Baker of the Yankton State Hospital in setting up their recommendations. Dr. Stoltz seconded the motion and it was carried.

Mr. Foster explained the Radiation Protection Act and what action has been taken on it up to this time. Endorsement or rejection by the Council was asked for by the Advisory Committee to the State Board of Health. Dr. Hohm moved to refer the laws and regulations to the Public Health Committee for further study and that they report their findings at the January Council meeting. Dr. Sattler seconded the motion and it was carried.

Mr. Foster read a letter from Dr. Hudgins concerning dues of members of the USPHS Commissioned Corps in the State Medical Association. Dr. Sattler moved that these men be included in our Association as military members. Dr. Hohm seconded the motion and it was carried.

Mr. Foster read a letter from the Medical Assistant's Society asking for funds to send a delegate to their national meeting in San Francisco. Dr. Bailey moved that the request be denied and that a letter be written to them telling them that it is not the policy of the Association to underwrite these expenditures. Dr. Sattler seconded the motion and it was carried.

Dr. Buchanan discussed the meeting of the Council's Committee with the Pharmaceutical Association concerning an Interprofessional Committee. Dr. Buchanan recommended that a Special Committee on Interprofessional Relations be set up to work with the Pharmaceutical Association. Dr. Stoltz seconded the motion and it was carried.

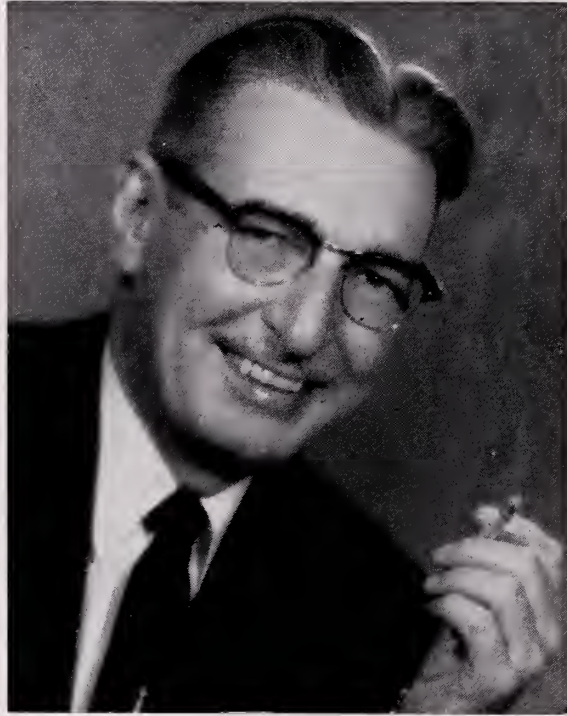
Mr. Foster read a letter from the AMA regarding the establishment of a Medical Advisory Committee to the Bureau of Old-Age and Survivors Insurance. Dr. Stoltz moved that the Special Committee on Aging be revised to include an Advisory Committee to the Bureau of Old-Age and Survivors Insurance. Dr. Peeke seconded the motion and it was carried. It was suggested that a change be made eventually to make this committee a Standing Committee.

Mr. Foster read a resolution from the AMA on Traffic Safety. Dr. Stransky moved the adoption of the resolution and the formation of a Special Committee on Traffic Safety. Dr. Sattler seconded the motion and it was carried.

Mr. Foster announced the dates of the North Central Conference and explained the purpose of the meeting. The Annual Meeting program was also discussed.

The meeting adjourned on motion at 5:15 P.M.

P R E S I D E N T ' S P A G E



One of the most frustrating aspects of modern day living is the almost insurmountable difficulty of acquiring enough capital to develop a measure of economic security. Caught between taxes and inflation a young physician finds that after paying expenses he has little or nothing left to invest.

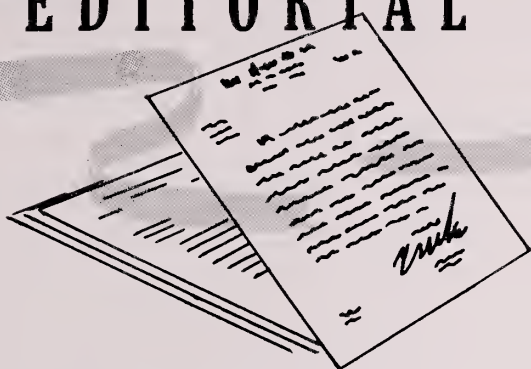
Compulsory Social Security is not an answer. It is actuarially unsound. It proposes to pay back to an individual many times the amount that has been collected from that individual. The simple physical law still exists that no human being has ever created something from nothing. This law also applies to moneys and credits. If the government uses money and credits that do not exist, they must be replaced by future taxes or the issuance of more money and credits. To cover the projected obligations of the Social Security program through our present generation would require taxation at a prohibitive level. To attempt to cover those obligations by the issuance of more money and government credit will inflate our economy by that exact amount. Historically, nations have destroyed themselves by these two avenues, either through the route of prohibitive taxes or by inflation or a combination of these factors. No nation has yet survived that has approached full socialization.

I believe the type of proposal contained in the Jenkins-Keogh Bill is our present best solution. In principle it is consistent with our ideal of private enterprise. It is actuarially sound. It allows a professional man to develop an annuity fund by regular yearly payments. These payments would be tax free in the year that they are paid, which is in the years that a physician is in a high bracket of tax liability. When he draws on his annuity after retirement he will pay the taxes at that time. He will usually then be in a lower tax bracket. If he isn't, we don't need to feel too sorry for him.

The Jenkins-Keogh Bill is on the agenda of the House Ways and Means Committee. A letter to Committee Chairman, Jere Cooper, U. S. House of Representatives, Washington D. C. in support of this bill would be helpful. Letters should be submitted to the committee before December fifteenth.

M. M. Morrissey, M.D.
Pierre, South Dakota

EDITORIAL PAGE



HEALTH INSURERS ADOPT STANDARDS

The Health Insurance Association of America has recently adopted a code of ethical standards made up of nine points on the sale and promotion of voluntary health insurance. The code, accepted by 261 companies in the United States and Canada follows: Offer only insurance providing effective and real protection against such loss as the policy is designed to cover; write its policies in clear and direct language without unreasonable restrictions and limitations; advertise its policies in such manner that the public can readily understand the protection offered, and not use advertising which has the tendency or capacity to mislead or deceive; select, train, and supervise personnel of integrity in a manner which will assure intelligent, honest, courteous sales and service; engage only in sales methods, promotional practices and other transactions which give primary consideration to the needs, interest, and continued satisfaction of the persons insured; endeavor to establish the insurability of persons at the time of application in every instance where such insurability is a factor in the issuance or continuance of the insurance in the liability of the insurer; pay all just claims fairly, courteously, and promptly, with a minimum of requirements; continue research and experimentation in order to meet the changing needs of the public and engage in keen, fair competition so the public may obtain the protection it needs at a reasonable price.

WHAT DO YOU MEAN — "NON-PROFIT"?

One of the chief distinctions between medically sponsored prepayment plans — such as Blue Shield — and the commercial health and accident insurance companies, is the Blue Shield is conducted on a "non-profit" basis, whereas the insurance companies are frankly business enterprises operated to earn a profit for their owners.

To state this difference is not to imply any criticism of either. The insurance companies have a long and honorable history of public service and they are an important part of America's business community.

Blue Shield, on the other hand, serves largely as an agency of the medical profession, performing a community service. Initiated by the medical profession, with the help of local industry, labor and civic leaders, Blue Shield is designed for one purpose only: to help people pay for medical services whenever the need for such services arises.

Blue Shield has succeeded in pioneering the medical care prepayment movement because the profession has guided it and supported it. Blue Shield's working capital was the pledge of the participating physician to deliver the medical services that Blue Shield has promised on his behalf.

In some cases, the participating physicians have accepted a fraction of scheduled Blue Shield payments in order to tide an infant plan over its early trials. In every case, local professional leaders have given their local Blue Shield Plans incalculable hours of service as trustees and advisers. None has ever

accepted one penny of compensation for such service as a committee member or trustee. As an agency of the medical profession, created for the sole purpose of facilitating the doctor's job of service to his patients, there has never been any need (for any third party) to make a profit out of the Blue Shield transaction.

Blue Shield's success is measured by the proportion of its income dollar that is expended for services to subscribers, the smallness of its operating costs and the quality of its doctor-support — **not** by the size of its reserves or its net earnings.

These earnings — these profits, if you will — belong to the subscriber.

"Non-profit" does not mean **no** profit. Much less does "non-profit" mean a profitless operation. "Non-profit" in Blue Shield means that the earnings of the Plan belong to the subscribers who support the Plan.

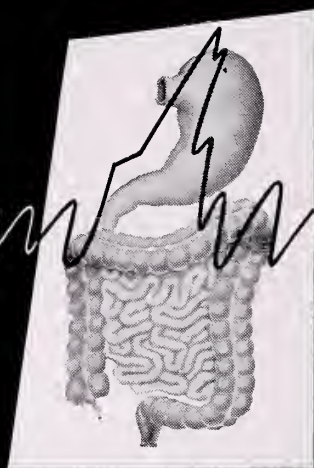
The meeting of the Sioux Falls Medical Assistants was held in the Chamber of Commerce Room, on October 7th with Dr. Roy Knowles, of the Mental Health Center, as the guest speaker. His talk was both interesting and enlightening, giving us a little insight in the handling or coping with the problem patient. We all appreciated very much the fact that Doctor had given us some of his time, as we all know what a very busy person he is.

The next meeting will be November 4th, with a panel discussion conducted by some of the Detail Men who call on the doctors here in Sioux Falls.

The Yankton District Medical Society held its regular meeting Wednesday, October 23, at the Medical School in Vermillion.

The speakers on the program were Richard D. Brasfield, M.D. and Joseph G. Fortner, M.D., both of Memorial Center, New York City. Dr. Brasfield talked on "Surgery of the Liver" and Dr. Fortner talked on "Diagnosis and Treatment of Malignant Melanomas."

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SEARLE

THE MONTH IN WASHINGTON

Several months in advance of the return of the 85th Congress for its election-year second session, influential figures in the field of health in both the executive branch and in Congress were being heard on what 1958 has in store for the medical profession.

Because of the roles they play in the Capital, their views are worth more than passing notice. One is the chairman of the important health appropriations subcommittee of the House, Rep. John Fogarty (D., R.I.). He used as a forum for his prophecies the annual convention of the American Hospital Association.

Other prognostications came from Dr. Aims C. McGuinness, special assistant for health and medical affairs to Secretary Folsom of the Department of Health, Education, and Welfare. Dr. McGuinness spoke out at a dedication ceremony of a new chronic disease and rehabilitation facility in Maine.

Mr. Fogarty places at the top of his predictions some action on federal construction aid to medical schools. The Rhode Island Democrat has his own bill on the subject, although there are others pending. Comments Mr. Fogarty: "... the shortage of health education facilities today is probably the most serious bottleneck in our whole medical system . . . These schools . . . fall far short of accommodating the fully qualified and com-

petent young men and women in America who are anxious to train and qualify in medical, dental and public health fields."

The record of the past several years has shown that no member of the House is listened to more carefully when it comes to health than Mr. Fogarty. His philosophy in the health field is worth noting: "It is now generally accepted that the health of our people is a major national resource and that the government, therefore, has a direct responsibility for the health of everyone."

Dr. McGuinness also spoke out strongly for federal aid to medical schools. Failure to meet the needs of the schools, he told his audience, would be "the worst kind of economy." He feels that the administration proposal for \$225 million in construction grants would bring classrooms and research laboratories "much closer to current and projected needs."

While neither man had any specific legislative proposals to make in the field, both foresee a growing role for hospitals in the practice of medicine. Dr. McGuinness put it this way: "General hospitals must broaden their services and achieve greater coordination. The term 'hospital care' should include not only bed care but diagnostic service as well as service to ambulatory patients."

* * *

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MEDICAL LIBRARY BOOKSHELF



RADIOISOTOPES IN MEDICINE

A British physicist, Francis William Aston, (1877-1945) was responsible for identifying the atomic species, making up each of the chemical elements found in nature, and demonstrating that all elements exist in nature in two or more forms identical in chemical properties but having different atomic weights. He constructed the first mass spectrograph and with its aid discovered hundred of isotopes.

Today nearly a thousand radioactive isotopes are known and the nuclear reactors of the National Government built for our atomic weapons program has made available at a reasonable cost, many of these. For improving the public welfare a division of biology and medicine, and an isotope division were created under the Atomic Energy Act. Carbide and Carbon company, contracting for Oak Ridge National Laboratory of AEC is a basic source of supply for direct distribution of a wide variety of isotopes, usually solutions of their simple organic compounds. A secondary supplier secures these and distributes them as chemicals or as pharmaceuticals to allocated users. Recently a representative of one of these secondary suppliers was a visitor to our medical school; Dr. Donaliev Tabern head of the Dept. of Radioactive Pharmaceuticals of Abbotts Laboratories.

For a number of years Dr. Tabern was a research assistant and instructor at the University of Michigan where he received his B.S., M.S., and Ph.D. degrees. He was also a lecturer and research fellow at Cornell after which he became Head of Special Research at Abbotts.

Dr. Tabern spent an hour at the Medical School talking to students and staff about

the diagnostic techniques and therapeutic purposes of radioisotopes. Using slides for illustration he ably outlined the progress that has been made in recent years in the use of radioisotopes; explaining the isotopes currently being used in medical diagnosis, how they are produced in the laboratories and packaged, how administered in therapy and for testing, and something about the instrumentation required in a radioisotope laboratory. From his vast store of knowledge and years of experience in research he packed a lot of information into the hours talk.

Dr. Tabern has written a number of articles published in recent journals. The following includes data from a few of these:

"Diagnostic techniques with radioisotopes" **American Journal of Medical Technology**. v. 22, 1956, p. 74. "Tracer level procedures" for such diagnostic technique as thyroid uptake and excretion studies; protein bound iodine and conversion rates; thyroid scanning and mapping; total blood and plasma volumes; liver function and circulation; pernicious anemia; total body water; brain tumors, and eye and skin tumor diagnosis. (Dr. Tabern mentioned in his talk that recently kidney diagnosis has been added to the list) For therapeutic purposes radioisotopes are used as sources of either beta or gamma rays in polycythemia and certain leukemias; hyper-thyroidism and cardiac dysfunction; some thyroid tumors; pleural and peritoneal effusions; inoperable tumor masses, and interstitial therapy.

"The modern medical radioisotope laboratory" **South Dakota Journal of Medicine and Pharmacy**. v. 9 1956, p. 360. The instrumentation needed is 1. A scaler. 2. "ratemeter" for tests of circulation time or liver function.

3. A scintillation counter of the probe type. (necessary). 4. The well scintillation counter. (An elaboration of 3). There also has been developed "mobile" measuring units which may be operated in the laboratory, in the doctor's office or in the patient's room. The most versatile is a system in which the standard scaler, the scintillation counter, and the device for holding and positioning this counter are made on a cart, but may be removed and used separately if desired.

"Techniques for pernicious anemia diagnosis with radiocyanocobalamin" by D. L. Tabern and R. Storey. **International Journal of Applied Radiation and Isotopes**. v. 1, Jan. 1957, p. 249.

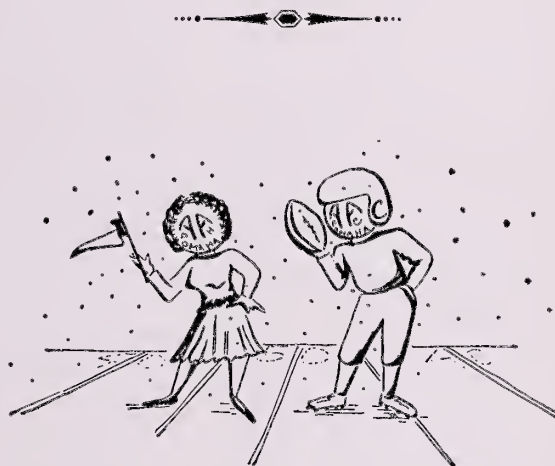
This paper represents an attempt to delineate the optimal conditions for the use of cobalt labelled B₁₂ in diagnosis of pernicious anemia and in testing of intrinsic factor samples. The subjects were patients in the hematology clinic of Cook County Hospital. It was found that after the dose was administered and urinary output determined, that most of the patients fell into two classes: (1) those with an excretion of less than 5% and (2) those with an excretion of over 10%. If the latter value is observed the hematologist can say with a considerable degree of accuracy that the patient does not have pernicious anemia. If less than 5%, the cause may be pernicious anemia, absence of intrinsic factor-producing tissue, sprue or possibly an abnormal intestinal flora. Repeating the test will show up pernicious anemia.

Dr. Tabern contributed a chapter to a recent book received in this library: **Therapeutic use of artificial radioisotopes** ed. by Paul F. Hahn, Wiley, 1956. This chapter was entitled "Availability and procurement of isotopes" It would be of value for anyone interested in the steps that should be taken for procurement and use of isotopes and the necessary experience and training required for using them. As certain applications have become routine radioisotopes for certain medical purposes are now allocated to individual physicians in private practice. The regulations for use in the United States are controlled by the Atomic Energy Commission by granting of allocations or licenses to qualified physicians. The Isotope Division (USAEC) in

1955 issued a booklet "The medical uses of radioisotopes-Recommendations and requirements of the A.E.C." This can be secured from Isotopes Extension, Division of Civilian Applications, U. S. Atomic Energy Commission, PO Box E. Oak Ridge, Tennessee.

It is interesting to note that the University of Michigan Medical School assigns every medical student during some time of his junior year to the Clinical Radioisotope Unit as part of his regular rotation. Also a preceptorship type of training has been given to many men in practice so they can learn to use the existing radioisotope centers intelligently for the diagnosis and treatment of patients and also to become licensed by the Atomic Energy Commission.

Mrs. Esther Howard
Medical Librarian



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ARRANGE CANCER FILM BOOKINGS THROUGH AMA

Hope in the thought that 75,000 lives in America need not be lost needlessly to cancer each year is the theme of a dramatic educational film recently added to the AMA Film Library. Titled "The Other City," the film stresses the encouraging fact that doctors currently are saving one in three patients as compared with a previous one-in-four ratio. Setting of the film is Racine, Wisconsin. Four basic thoughts are developed: (1) Racine empty and lifeless; (2) a symbolic representation of what cancer is; (3) how the 75,000 inhabitants of this token city could have helped save themselves, and (4) Racine alive and bustling.

Produced by the American Cancer Society, the 16mm color film runs 22 minutes and 30 seconds. It is suitable for showings on local television as well as for church, club and school gatherings. Medical societies may book the film through the AMA Film Library.

AMA TO CO-SPONSOR SYMPOSIUM AT AAAS MEETING

A program on normal and abnormal aspects of the skin will be sponsored jointly by the AMA's Committee on Cosmetics and the Society for Investigative Dermatology December 28-29 during the 124 annual meeting of the American Association for the Advancement of Science in Indianapolis. The two-day symposium entitled "The Human Integument — Normal and Abnormal" will be presented before the medical sciences section of the AAAS. Four major topics will be discussed: (1) The Integument as an Organ of Protection; (2) Circulation and Vascular Reactions; (3) Sebaceous Gland Secretion, and (4) Pathogenetic Factors in Premalignant Conditions and Malignancies of the Skin.

Dr. Stephen Rothman of Chicago, chairman of the AMA Committee, will serve as symposium chairman. Further details may be obtained by writing directly to the Committee on Cosmetics.

OB-GYN BOARD EMANINES IN JAN.

The Part I Examinations of the American Board of Obstetrics and Gynecology, are to be held in various parts of the the United States and Canada, on Thursday, January 2, 1958, at 2:00 P.M.

Candidates notified of their eligibility to participate in Part I must submit their case abstracts within thirty days of notification of eligibility. No candidate may take the Written Examination unless the case abstracts have been received in the office of the Secretary.

Current Bulletins outlining present requirements may be obtained by writing to the Secretary's office.

Robert L. Faulkner, M.D.
American Board of
Obstetrics and
Gynecology
2105 Adelbert Road
Cleveland 6, Ohio

AMA SETS UP RESEARCH FOUNDATION

The American Medical Research Foundation recently was established by the AMA. Principal purposes of the Foundation will be: (1) to promote the betterment of public health through scientific and medical research; (2) to plan and initiate scientific and medical research, and (3) to collect, correlate, evaluate and disseminate results of scientific and medical research activities to the general public. Voting members of the Foundation will be AMA trustees. Meetings will be held annually at the time of the AMA Annual Sessions.

MEDICAL EDUCATION MEETING FEB. 9-11

Problems confronting medical education in the rapidly changing scene will be the main topic of concern at the 54th annual Congress on Medical Education and Licensure February 9-11. Sponsored by the AMA Council on Medical Education and Hospitals, the Federation of State Medical Boards of the United States and the Advisory Board for Medical Specialties, the Congress will be held at the Palmer House, Chicago. The conferees will view medical education's broad potential in the light of four factors — the changing characteristics of the nation's population, sociological trends, economy and medical knowledge — and the implications of these factors on medical education, medical research and medical care.

In addition, four workshop committees — composed of representatives from the AMA, the Council, the AAMC, higher education, government, business, insurance, labor and agriculture — will discuss various problem areas, endeavor to clarify questions that need to be raised and recommend possible ways that medicine can assume the leadership in solving these problems. The committees' reports will be presented before the entire Congress for discussion from the floor.

AMA COMMITTEES SCHEDULE MEETINGS

Two committees of the AMA Council on Medical Service plan regional meetings Monday, December 2,

in Philadelphia just prior to the AMA's 11th Clinical Session. **The Committee on Maternal and Child Care** — first regional meeting on perinatal mortality and morbidity. Invitations are being sent to members of maternal and child care committees in Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia. **The Committee on Aging** — third regional conference for members of state committees on aging. Subjects to be discussed include physical examinations and a health maintenance program, guides for the organization and operation of medical society committees on aging, medical education in caring for the aged, pre-retirement counseling, and special research programs of a medical school.

Physicians interested in attending either of these sessions should contact the Council for further details.

OB-GYM AND G. P. GROUPS MEET

A combined meeting of the South Dakota Society of Obstetrics and Gynecology and the South Dakota Academy of General Practice was held in Huron September 28th and 29th.

Featured on the program were out-of state speakers, R. Holly, M.D., Omaha; M. Kalberg, M.D., Sioux City; Richard McGraw, M.D., U of Minnesota; and James Casey, M.D., U of Minnesota. South Dakota physicians on the program included F. D. Leigh, Huron; Carl Magsick, Sioux Falls; Thomas Price, Yankton; C. R. Stoltz, Watertown; John Hermanson, Sioux Falls; and Charles Stern, Sioux Falls.

HURON DISTRICT HOLDS SEMINAR

The Huron District Medical Society held its third annual "Central South Dakota Seminar on October 26th and 27th. On the program were W. G. Schultz, M.D., Tuscon; Edmund C. Burke, M.D. Mayo Clinic; and Joseph Koveky L.L.D., Chicago.

A Sunday evening stag highlighted the social activity.

The Committee for the program was made up of Drs. Fred Leigh, Howard Saylor Jr. and David Buchanan.

DR. ASCHER WHITE ABERDEEN SPEAKER

About 25 members attended the regular monthly meeting of the Aberdeen District Medical Society on October 2nd in the Mexican Room of the Sherman Hotel. After a fine steak dinner, routine business matters were disposed of and Dr. Ascher White, Internist at Nicollet Clinic Minneapolis, Minnesota, presented a very fine talk on "Differential Diagnosis of Chest Pain."

S. D. DOCTORS ELECTED IN M.V.M.S.

The Mississippi Valley Medical Association met in St. Louis on September 26th and elected two South Dakotans to positions in the organization. **Dr. R. G. Mayer** of Aberdeen was re-elected as a vice-president and **Dr. A. W. Spiry** of Mobridge was named to the Board of Directors. The Board of Directors is scheduled to meet November 24th in Quincy, Ill.

G. P. REVIEW AT DINNER

The University of Colorado's Annual General Practice Review will be held at the University's Medical Center in Denver, January 13-18, 1958.

Detailed program and reservations can be obtained by writing the Office of Postgraduate Medical Education, 4200 East Mirth Avenue, Denver 20, Colorado.

HEMATOLOGISTS TO MEET IN ROME

The Seventh Congress of the "International Society of Hematology" will be held in Rome at the "Palazzo dei Congressi," EUR, on September 7 to 13, 1958.

The official languages of the Congress will be English, French, German, Italian and Spanish.

Preliminary program: 1) Immunohematology; 2) Hemorrhagic Disorders; 3) Leukemia; 4) Anemia; 5) Nucleonics; 6) The Spleen and the Reticulo-Endothelial System.

For further information please write to: **Segreteria del VII Congresso Internazionale di Ematologia — Istituto di Patologia Medica — Policlinico Umberto I — ROMA (Italia).**

The Congress of the International Society of Blood Transfusions will be held at the same "Palazzo dei Congressi" on September 3 to 6.

ACCIDENT BOOKLET IN DEMAND

The booklet "What's the Answer" on childhood accidents has proved highly popular with the public since its publication by the Medical Association.

After receiving a recommendation from the Yankton District Medical Society, the Council authorized printing and distribution of 10,000 booklets. Five hundred requests came in as a result of mention of the booklet on an afternoon TV show. The Farmers Union asked for 2500.

PTA groups took another 500. Requests from doctors ran the total request to 22,500. A second printing of 15,000 was ordered and all requests have now been filled.

AMA SESSION TO PHILLY

Approximately 400 American doctors are expected to attend the American Medical Association's 11th clinical meeting Dec. 3-6 in Philadelphia.

The postgraduate education meeting is aimed at helping to solve the daily practice problems of the family physician, according to Dr. Thomas G. Hull, secretary of the A.M.A.'s Council on Scientific Assembly.

Meetings will be held in Convention Hall and at the Bellevue-Stratford Hotel, where the House of Delegates, the A.M.A.'s policy-making body, will hold sessions.

The meeting has been planned in cooperation with Philadelphia physicians. General chairman for the meeting is Dr. Gilson Colby Engel, Philadelphia.

In Convention Hall will be 120 scientific exhibits prepared by physicians and the A.M.A. bureau of exhibits. Among them will be one on medical history, prepared by a group of Philadelphia doctors. There also will be 160 technical exhibits presented by pharmaceutical houses, medical equipment manufacturers, food processors, medical book publishers and other commercial organizations.

PHARMACEUTICAL SECTION



HAROLD S. BAILEY, PH.D.
EDITOR

Division of Pharmacy
South Dakota State College
Brookings, South Dakota

PHARMACEUTICAL *Paper*



PHARMACY AND THE FOOD AND DRUG ADMINISTRATION*

by

Maurice P. Kerr**
Minneapolis, Minnesota

It is a pleasure to appear on a program of your convention to discuss the activities of the Food and Drug Administration as they relate to pharmacy. I think we can agree that one of the principal objectives of most of the Nation's pharmacists of more than 155,000 men and women is to bring the fruits of modern medicine within the reach of all people. First, I believe it would be well for me to tell you where we are in the governmental picture, and, very briefly, something of the organization of the Food and Drug Administration.

This Administration is one of the health agencies in the U. S. Department of Health, Education, and Welfare. As you may know, also in this Department are the Public Health Service and its National Institutes of Health and the Communicable Disease Center, the Social Security Administration of which the Children's Bureau is a part, the Office of Vocational Rehabilitation, St. Elizabeth's Hospital, Howard University, and Freedmen's Hospital.

It is the function of the Food and Drug Administration to assure the integrity of all foods, drugs, cosmetics, and therapeutic devices that are shipped in interstate commerce, including those which are brought into this country from abroad. I do hope that I can

cover at least those points about our work that are of particular interest and concern to the pharmacist.

In the first place, I would like to make it wholly clear that this is not a police organization in the usual sense, and we do not have direct police powers. We do not make arrests. We are an agency devoted to scientific investigation. I would not minimize the fact that those investigations are aimed at law enforcement, and when our investigations show that there has been a violation of the law, the facts are reported to the United States Attorney so that the cases can be prosecuted in the Federal courts; however, any arrest or service of papers that becomes necessary is done by the United States Marshal and not by Food and Drug Administration personnel.

As the foregoing statement implies, this is an organization made up primarily of scientists, physicians, pharmacologists, biochemists, chemists, bacteriologists, pharmacists, and other scientists needed to administer intelligently a law which is designed to insure that drugs and therapeutic devices have the quality and properties claimed for them.

To carry out our investigatory functions, we have established 16 field District offices in the major cities throughout the United States. Each is staffed with a group of inspectors who make the actual field investigations and each has a laboratory where most ordinary analyses can be made. In addition to this field organization, we have a headquarters staff in Washington for planning and

*Presented to the South Dakota State Pharmaceutical Association, Rapid City, S. Dak., June 22, 1957.

**Chief, Minneapolis District, Food and Drug Administration.

supervision, and a Bureau of Medicine to give us advice on medical questions. We also have in Washington certain specialized laboratories which are staffed and equipped to do analytical work which cannot be done in the field; and, in addition, the Washington laboratories conduct research on new or improved methods of analysis, and toxicity studies on a great variety of products, including such things as new insecticides or other chemicals that may find their way into our food supply. This, then, briefly, is how we are set up to do our work.

Before describing further just what we do, I think it would be well to tell you some of the things that we do not do, because that is a source of some confusion and misunderstanding. First, let me say that the regulation of advertising (radio, television, newspaper, etc.) is primarily a function of the Federal Trade Commission and not of the Food and Drug Administration.

Also, I want to remind you that the strict controls exercised over the distribution of narcotics is a function of the Bureau of Narcotics of the Treasury Department and has nothing to do with the Food and Drug Administration except that we do exchange information.

There is a division of the Public Health Service which licenses the manufacture and interstate distribution of serums, toxins, vaccines, and similar products, including human blood and its derivatives. We do virtually nothing in the way of investigating the quality or use of products subject to this special law except on the occasions when we are requested to do so as an assistance to the Public Health Service.

Finally, we should make it clear that we have jurisdiction, generally speaking, only over products which have moved in interstate commerce. A drug which is entirely manufactured and sold within the borders of a single State is not subject to our jurisdiction.

You of course know that we have no authority to control or regulate the practice of medicine as such. As you may know, we have on occasion caused the institution of prosecution actions against physicians, but that has always been for something done by the physician entirely outside the practice of his profession.

So much for those aspects of drug regulation which are the responsibility of other agencies. I have dealt with them to this extent simply because in our experience there is some confusion on the part of the public about the area of responsibility of the Food and Drug Administration. Perhaps a good way to explain our own functions would be to outline very briefly some of the provisions of the Federal Food, Drug, and Cosmetic Act which seek to insure the safety and efficacy of drugs, devices, and cosmetics.

Among the most important drug provisions of the Act are those which require informative labeling as to composition, adequate directions for use, and warnings against misuse where such warnings are necessary for the protection of consumers. The Act prohibits any false or misleading statements in the labeling of a drug. Drugs listed in the United States Pharmacopoeia and The National Formulary are required to meet the standards set forth in those compendia. A new drug may not be marketed until proof of its safety acceptable to the Food and Drug Administration has been submitted in the form of a new-drug application. Predistribution certification is required for insulin, certain antibiotics, and coal-tar colors used in foods, drugs, and cosmetics.

Prescription Legend Drugs

The subject of authorization sale of prescription legend drugs is the one which is still of greatest current interest to the practicing pharmacists. I am sure that the requirements of Section 503(b)(2) of the Federal Food, Drug, and Cosmetic Act, the amendment of which is most commonly referred to as the Durham-Humphrey Act, as it applies to the retail sale of prescription drugs, are sufficiently well-known to you so that no review is required at this time. The rule to remember is to observe the caution "Federal Law Prohibits Dispensing Without Prescription," if it appears on the label, and neither sell without prescription nor refill without physician's authorization.

I wish we could report that after 5 years of enforcement the problems this legislation was designed to combat have been materially reduced and that it is no longer necessary for the Food and Drug Administration to devote substantial time to investigating reports that prescription drugs are being dispensed

illegally. Unfortunately, such is not the case. Despite our efforts to date, we are still receiving more reports of illegal sales than we have available manpower to investigate.

Increasing activity by several of the States is lessening our enforcement burden, but the situation is still not satisfactory. While our inspectors have encountered increasing reluctance among pharmacists to make over-the-counter sale of barbiturates, amphetamines, and related drugs to strangers, this is not a significant improvement. Persons who formerly sold openly are now more cautious. Their purpose seems to be to avoid selling to someone who might a Food and Drug inspector rather than not to sell, without prescription, of course, to anyone. Some even bluntly ask our men whether or not they are government agents. At least this shows an increased awareness of the fact that there is a law that is actively enforced and that the penalties assessed by the courts make it inadvisable to get caught violating it.

In recent years we have been investigating traffic in prescription legend drugs, particularly the central nervous system stimulants, such as amphetamines, among persons outside the normal drug trade channels. The full extent of this traffic is not known, but it certainly is appreciable. One of the disturbing features of this business is the evidence that the drugs in most cases first leave the legitimate channels of commerce at the drugstore level; as an example, during our investigation into the unauthorized distribution of amphetamines to truck drivers, we found one of the prime sources to be a drugstore in North Carolina. One of our inspectors in two visits to this store and one to another, to which he was referred by the pharmacist, purchased a total of 3,000/10 mg. amphetamine sulfate tablets. Similar conditions have been found to exist in other sections of the country.

We hear reports of complaints from pharmacists who contend that the tactics of the Food and Drug inspectors are such that reputable pharmacists are entrapped into making unauthorized sales they would not otherwise make. Nothing could be further from the truth. The claim of entrapment is a defense used more frequently in contested court actions involving illegal sales. The charge has never been sustained.

Investigation of the practices of a pharmacist or a drugstore is usually started when we receive information that one or both are operating in violation of the dispensing requirements of the Federal Food, Drug, and Cosmetic Act. It preliminary investigation verifies the validity of the report, then evidence is collected for the court, to establish guilt. I am sure that I am not revealing anything of a confidential nature when I tell you that our inspectors frequently use the same approach as the one that has reportedly led to other violations by the suspect. In other words, if our information is that all one needs to do to secure dangerous drugs from the pharmacist, without a prescription, is to tell the man that "Joe sent me," then you may rest assured that when our inspector approaches the pharmacist he will state that "Joe sent me" and attempt his buy. This, we believe, is not entrapment.

Prescription Refills

I think it would be well to point out that the physician can authorize refilling of his prescription as many times or for as long a time as he feels necessary or desirable. He can do that by a notation on the original prescription or by subsequent written or telephoned authorization to the druggist. A word of caution is in order about the "ad lib" type of refill authorization which makes a prescription refillable at the request of the patient for an unlimited time. The legality of this kind of authorization is doubtful but has never been settled by a Federal court. Our practical reason for objecting to such a refill authorization is that it is subject to abuse and, in our experience, is too often abused.

In such a discussion as this, I believe it appropriate to point up our joint responsibilities. The obvious purpose of the law is to impose requirements which will and insure the safe, effective use of drugs in the interest of health. It does this by outlawing practices which are contrary to this basic objective.

We in the Food and Drug Administration have the duty of enforcement. Because of the nature of drugs, the retail drug business is different from all other forms of retailing. So far as I know, it is the only retailing business which requires a professional education as a statutory requirement to engage in it. The purpose of such an education is to pre-

pare individuals who will have professional skills and ethics necessary to fulfill the important public responsibility of serving as the custodians and dispensers of drugs in their respective communities. Basically, the objective is exactly the same as that of the Federal Food, Drug, and Cosmetic Act; namely, to promote and insure the safe and effective use of drugs in the interest of health.

The Food and Drug Law specifically aids the druggist in that the prescription section of the law gives to the druggist an exclusive franchise to dispense these potent drugs on the prescriptions of licensed physicians and thus to keep them from being diverted to illicit channels and uses. It is made clear that it is the responsibility of the doctor to prescribe the medicine and the responsibility of the pharmacist to provide the medicine. This puts the responsibility where it belongs and does not interfere with the practice of either profession. Jointly, the law stands back of every drug, cosmetic, and food product requiring their integrity, and it likewise requires the integrity of those who are licensed to prescribe and to dispense.

There has been some misunderstanding about the sales of restricted drugs, particularly as to the matter of refills. Certainly, you do not sell a restricted drug to anyone unless he has a bona fide prescription for that drug. You are interested in the validity of the prescription; however, occasionally, when a refill is requested, the interest is not always there. Some pharmacists hesitate to call the doctor for authorization. Actually, calling the doctor when his patient wants a refill which he has not authorized is a very important service both to the doctor and to the patient. The doctor may not want that particular medication to be continued. In any event, he needs to be informed that his patient still feels it necessary to take the medicine he prescribed. The doctor has a responsibility to that patient and should be grateful to you for your professional cooperation. Every one of these services which you perform contributes importantly to the fundamental purposes of the Federal Food, Drug, and Cosmetic Act. Every one helps to further the safe, effective use of drugs and thereby protects the health of the American people.

BUY QUALITY IN YOUR PRINTING

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PRESIDENT'S PAGE

Rx



Fellow pharmacists:

When you read this the National Association of Retail Druggists Convention in Minneapolis October 6-14 will only be a memory-however we hope that many of you enjoyed the convention as much as we did. Then, of course, came "Hobo Day" at State College, the grand homecoming at which we always see so many of our South Dakota pharmacists.

Every pharmacist in South Dakota who gives serious thought to the future of our profession can be proud of the way that the State Pharmaceutical Association has been acting in cooperation with the allied health professions in the state. In turn, it is heartening to observe the cooperation we receive from them. What a tremendous step forward it is that the public health professions in this state have set up interprofessional relations committees and are working together. Our common goal is better community health and improved public and professional relations.

The members of these committees should be complimented for the part that they play in this great undertaking. They should be supported by the members of all the associations involved. With this type of planning and cooperation the future brightens and there is no limit to the heights which can be attained by the health professions in this state.

George A. Lehr



IS THERE REALLY AN ENGINEER-SCIENTIST SHORTAGE?

Since the end of World War II the American public has heard numerous reports indicating that a shortage of scientists and engineers exists.

Lately there have been reports suggesting that there really isn't any shortage and that perhaps our children are being black-jacked into scientific careers.

The Manufacturing Chemists' Association has reviewed about everything of consequence published on the subject in the last year. We have studied reports and statements and met with interested authorities in education, business and government. We would like to give you our latest estimate of the situation and a few conclusions that, to us, seem inescapable.

First the estimate:

..... The U. S. Office of Education has reviewed the engineer supply and demand picture 1955-56 and, based on anticipated increases in the Gross National Product, concludes that we will have a shortage of 8,000 engineers per year for the next ten years. This is anticipated despite an annual increase in the number of engineer graduates.

..... The U. S. Office of Education also reports that in 1950 there were 136,000 science teachers. This number has dropped to 75,000 full or part-time science teachers.

(An editorial appearing in a recent issue of Chemical News published by the Manufacturing Chemists Association)

..... The American Society of Engineering Education tells us that over the next ten years the number of chemical, metallurgical and petroleum engineering teachers at the college level must show increases ranging from 53 per cent to 78 per cent in order to take care of the anticipated number of students. The shortage in this area is already being felt. According to ASEE, in the 1956-1957 academic year eight per cent of budgeted engineering faculty posts were unfilled.

Add to this recent reports of the Atomic Energy Commission, the Scientific Manpower Commission, the National Education Association and the Engineering Manpower Commission, to say nothing of comments by individual business and industry leaders, and it would appear that the shortage of engineers and scientists is no mirage.

One might say, "All right, but I don't get it. If the number of engineers and scientists is actually rising each year, how is it we face a continued shortage?"

There are three reasons:

1. The rapid development of our body of technology and our steadily increasing industrialization over the last 50 years has outstripped our development of human resources — the technical manpower needed to run and help expand our industrial machine.

2. Our population increases in the recent past, plus anticipated short term increases (200 million by 1975), plus our demand for a

continually higher level of living, require a steady increase in industrial growth (now averaging about four per cent per year). More technology means more technologists.

3. Although we now face no genuinely critical shortage of raw materials, we must plan for the day when we will have to do more with less — or find substitutes. This whole effort is a scientific one. For this we need sliderules, not shovels.

We need more technologists in the work force. We need more science teachers at all levels. We need more physical facilities, school buildings, laboratories. One step below the professional level, we need more skilled technicians. Also, we have to make sure we fully utilize the scientists and engineers we now have.

If we don't do all these things our economy cannot advance at its present rate. In fact, our industrial progress will be slowed and our ability to prevent war reduced.

We feel that there exists within our national framework the answer to this problem and that some progress is being made. One heartening example is the work of the President's Committee on Scientists and Engineers which is now engaged in a national study of the situation.

A year ago the Manufacturing Chemists' Association launched a five-year, million-dollar education program. This program is designed to interest students at the elementary junior and senior high school levels in the field of science, and to assist chemical companies in education-cooperation work at the community level.

VOLUNTARY HEALTH INSURANCE

The number of persons protected against the cost of hospital and surgical care through insurance company policies has been increasing at an accelerated pace in the last few years, reported the Health Insurance Institute recently. In an analysis of the trends in voluntary health insurance coverage in the United States during the past six years, the Institute said that the growth rate in the last three years of both forms of health cost cov-

erage has risen markedly with each succeeding year.

According to figures supplied by the nation's insurance companies, the Institute's analysis revealed, there were 66.3 million persons covered for hospital expenses at the end of 1956 through individual and family health policies and through group insurance programs, a 79% increase over the 1950 total of 37 million.

A closer examination of this growth trend over the past three years shows a constantly faster rate of expansion in hospital expense protection. In 1954 there was an increase of 5.9% over 1953 in the number of people covered, the percentage gain in 1955 over 1954 was 7.9%, and the rate of growth in 1956 over 1955 was 11.1%.

Surgical expense insurance, which helps pay for the cost of operations, included some 63 million persons covered in 1956, through policies available from insurance companies, continued the Institute report. Compared with the 1950 total of 33 million, the rate of growth in the number of people protected was 91% during this six-year period.

As with hospital expense insurance, the yearly increase in the number of people with insurance policies covering surgical expenses has been accelerating during the past three years, the Institute pointed out. The rate of growth in 1954 was 4.6% over 1953; in 1955 the increase was 7.3% over 1954; and 1956 recorded a rise of 11.2% in the number of people protected over the comparable period for 1955.

Regular medical expense insurance experienced a phenomenal period of expansion in the six years covered by the Institute study. A relatively newer form of health cost protection as compared with hospital and surgical expense insurance, regular medical expense coverage, providing for doctor visits for non-surgical care, rose 281% in the number of people covered between 1950 and 1956. By the end of last year, there were 29.8 million persons included in policies available from insurance companies covering costs for medical care, as compared with 7.8 million in 1950.

Comparing the growth trends of regular medical expense insurance during the past three years, the Institute reported a 12.9% increase in 1954 over 1953, and a rate of growth of 20.8% between 1954 and 1955. In 1956 the increase in the number of people was 18.9% over 1955.

The newest form of health cost protection, major medical insurance, out-paced all other forms of coverage. Introduced by the insurance business in 1948, major medical expense policies help cover the costs of serious, or catastrophic illness, including hospital bills, physicians' charges and other medical care services, and are available alone or as a supplement to the other types of expense

policies.

At the end of 1952, when the first accurate records were available, there were some 689,-000 persons in the nation with major medical coverage. In the four years since, this form of health insurance rose at an unprecedented rate of 1188%, for a total in 1956 of 8.9 million persons. A recent estimate made by the Health Insurance Council was that, as of May 1, 1957, this total exceeded 10 million persons, demonstrating a continuance in the rapid growth of this form of insurance against the cost of illness and accident.

A breakdown of the analysis of the six-year trend in voluntary health insurance coverage is as follows:

ANALYSIS OF GROWTH OF VOLUNTARY HEALTH INSURANCE 1950-1956*

Type of Coverage	1950	1951	1952	1953	1954	1955	1956
No. of persons (000)	36,972	44,572	47,272	52,218	55,282	59,654	66,259
Yearly % increase		20.6	6.7	10.5	5.9	7.9	11.1
Net persons gained (000)		7,599	2,700	4,946	3,064	4,372	6,605

*Adjusted for duplication of persons covered among insurers.

SURGICAL EXPENSE:

No. of person (000)	32,994	40,013	45,328	50,464	52,806	56,645	62,996
Yearly % increase		21.3	13.3	11.3	4.6	7.3	11.2
Net persons gained (000)		7,019	5,315	5,136	2,342	3,839	6,351

MEDICAL EXPENSE:

No. of person (000)	7,807	11,430	14,265	18,361	20,721	25,031	29,756
Yearly % increase		46.4	24.8	28.7	12.9	20.8	18.9
Net persons gained (000)		3,623	2,835	4,096	2,360	4,310	4,725

MAJOR MEDICAL EXPENSE:

No. of person (000)			689	1,220	2,198	5,241	8,876
Yearly % increase				77.0	80.2	138.4	69.4
Net persons gained (000)				531	978	3,043	3,635

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THERAPEUTIC BLOOD LEVELS ACHIEVED

Many physicians advantageously use the parenteral forms of ACHROMYCIN in establishing immediate, effective antibiotic concentrations. With ACHROMYCIN you can expect prompt

INTRAMUSCULAR Used to start a patient on his regimen immediately, or for patients unable to take oral medication. Convenient, easy-to-use, ideally suited for administration in office or patient's home. Supplied in single dose vials of 100 mg., (no refrigeration required).

MYCIN



Hydrochloride
Tetracycline HCl Lederle

IN MINUTES -- SUSTAINED FOR HOURS
control, with minimal side effects,
over a wide variety of infections -
reasons why ACHROMYCIN is one of to-
day's foremost antibiotics.

PERSONAL HEALTH CARD

Information concerning the health status of accident victims is essential to the treatment of such persons — yet the unconscious person cannot tell what might have contributed to his condition. Nor can he tell if he is a diabetic, epileptic, potential bleeder or suffering from a drug allergy.

These and other essential facts which might help those giving him emergency treatment should be incorporated in a personal health card, writes Lillian Dillard, R.N. in the July issue of the American Association of Industrial Nurses Journal.

She points out that the idea of carrying emergency information concerning one's health is certainly not new. "It is a well-known fact that a diabetic or epileptic should have this information on his person at all times. As another example, a person who has been taking Antabuse can become extremely ill if given alcohol."

"How often, however, do we fail to suggest that a person known to have had a severe allergic reaction to certain drugs carry in-

formation to this effect. Do we always suggest that people who have had X-ray therapy keep a record of this and give this information to physicians they may have in the future? What about the person who wears glasses — do we let him know that he should carry a copy of his prescription in case his glasses are broken when he is on a trip or away from his doctor?"

Miss Dillard suggests a practical solution—a comprehensive personal health card. "To insure that the person would carry it, it should be wallet size and no more bulky than two-fold in place for information on all four sides. In order to be authentic, certain information (immunizations, diabetic or epileptic treatment, for example) should be validated by the family physician."

As we read this the idea occurred that furnishing our customers with this type of personal health card would be a substantial contribution of the pharmaceutical profession toward better community health. For your interest the form of personal health card as suggested by Miss Dillard is reproduced below.

PERSONAL HEALTH CARD, TO BE CARRIED IN BILLFOLD

(outside fold)

DATES

- X-RAY and X-RAY therapy:

- Glasses: (Prescription)

- Hearing Aid:

- Group Ins. & Hospitalization Data:

Name _____

Address _____

Telephone No. _____

PERSON TO NOTIFY IN EMERGENCY

Name _____

Address _____

Telephone No. _____

FAMILY PHYSICIAN

Name _____

Address _____

Telephone No. _____

(4)

(1)

(inside fold)

- Blood type & RH factor:
- Immunizations-Date-M.D.'s signature
- Tetanas Toxoid
- Polio
- Smallpox
- Typhoid
- Cold
- Other

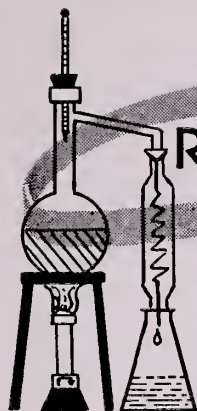
Other Information and Instructions by M.D.*

*List conditions such as allergies, epilepsy, cardiac, ulcers, hemophilia, amnesia, hernia, diabetes, high blood pressure, etc.

_____ M.D.

(2)

(3)



RECENT PHARMACEUTICAL *Specialties*

FURESTROL SUPPOSITORIES

Description: Furestrol Suppositories are a new form of Furacin Urethral Suppositories to which estrogen has been added. Each Furestrol Suppository contains Furacin 0.2% dipiperodon hydrochloride 2% and diethylstilbestrol 0.0077% (0.1 mg.) in a water-dispersible base.

Indications: The combination of an estrogen, antibacterial and anesthetic in Furestrol Suppositories makes it possible to control with a single medication the dyspareunia, dysuria and other pelvic discomfort associated with senile urethritis in postmenopausal women. Diethylstilbestrol is added to reserve the involutional changes which cannot be effected by antibacterial measures alone. Furacin achieves wide-spectrum bactericidal action without tissue toxicity. Dipiperodon-HCl provides local anesthesia, and insertion of the suppository, which melts at body temperature to form a lasting, watermiscible film, achieves gentle dilation.

Dosage: One suppository, morning and night, after voiding; continue for at least one week and until symptoms disappear. Patients with senile urethritis will require maintenance on one or two suppositories weekly.

Dosage Form: Hermetically sealed in orchid foil, box of 12.

Source: Eaton Laboratories, Norwich, N. Y.

POLYMAGMA

Description: Each 30 cc. or fluidounce of Polymagma contains: 3 gm. of Claysorb (activated attapulgite, Wyeth); 300 mg. dihydrostreptomycin; 120,000 units polymyxin B sulfate, and 270 mg. pectin, with 0.05% methylparaben, 0.01% propylpara-

ben, and 0.04% butylparaben as preservatives. A special alumina gel is used as the vehicle.

Indications: Polymagma is indicated for the symptomatic treatment of diarrhea and for specific therapy in bacterial diarrheas due either to streptomycin or polymyxin-sensitive organisms.

Dosage: Polymagma is administered orally in suspension form. Because of its high potency, it is effective in smaller doses than usually required for antidiarrheal drugs. The recommended dosage is 20 cc. (4 teaspoonfuls or approximately 1 tablespoonful) 3 or 4 times daily before meals, depending upon the response. For infants and children, this should be adjusted according to weight and response. A suggested initial dose is 2 tablespoonfuls 3 times daily.

Dosage Form: Suspension, 8 fluid oz. bottle.

Source: Wyeth Laboratories.

LENIC CAPSULES

Description: Each capsule contains 495 mg. of linoleic acid (two double bonds), 20 mg. of linolenic acid (three double bonds), 175 mg. of oleic acid (one double bond) and 100 mg. total of tetraenoic, pentaenoic and hexaenoic acid (four, five and six double bonds).

Indications: Lenic capsules in combination with niacin have been under clinical test for more than a year in the management of cholesterol blood levels. The unsaturated fatty acid complex in combination with a variety of vitamin regimes, has been clinically evaluated in dermatological, allergic and arthritic states. Studies in these fields are continuing.

Dosage: In the management of blood-cholesterol levels, the recommended dosage is one

Lenic capsule four times a day for ten to twelve weeks, then one capsule twice a day as maintenance therapy. For prophylaxis, one capsule twice a day is suggested.

Dosage Form: Bottles of 500 capsules.

Source: Crookes-Barnes Laboratories.

V-Cillin K

Description: Tablets of penicillin V potassium.

Indications: In clinical studies 'V-Cillin K' has achieved higher, faster blood levels than any other oral penicillin. High therapeutic levels are reached within 15 minutes.

The maximum levels attained with the new drug are four times as high as those of penicillin—G and double those of penicillin V, the clinicians found. Responses equivalent to those of parenteral administration of penicillin—G have been noted.

A potassium salt of penicillin V, the new antibiotic owes its quick action in part to a tablet designed to disintegrate in stomach acids within about five minutes.

Major reasons for the effectiveness of 'V-Cillin K' are its solubility and stability in the digestive tract.

These factors enable 'V-Cillin K' to overcome the disadvantages of penicillin—G, which is largely inactivated by stomach acids, and penicillin V, which is not completely dissolved in the digestive tract.

Dosage Form: 'V-Cillin K' is supplied in scored tablets of 125 mg. (200,000 units) and 250 mg. (400,000 units). The smaller tablets are available in bottles of 50; and 250 mg. tablets are in bottles of 24.

Source: Eli Lilly and Company.

THORAZINE SPANSULE

Description: Sustained release capsule of chlorpromazine offering the convenience of all-day or all-night therapy with a single dose.

Indications: Thorazine Spansule capsules are indicated wherever other oral dosage forms of Thorazine have proved valuable. The advantages of the Spansule capsule dosage form are particularly helpful in: Mental and emotional disturbances in ambulatory patients; Severe psychoses (especially maintenance therapy); Chronic somatic conditions complicated by emotional stress — conditions such as arthritis, severe tension headache, causalgia, tuberculosis, gastrointestinal disorders and chills; Protrac-

ted nausea and vomiting; Pain; Cancer; Severe asthma; Dermatological conditions and Pediatrics.

Dosage: Important: All four strengths of the Thorazine Spansule capsule have the same duration of action; they differ only in intensity of effect.

Dosage should be adjusted to the response of the individual and the severity of the condition.

In most conditions, the suggested starting dosage is one 30 mg. or 75 mg. Thorazine Spansule capsule taken upon arising. (In more severe conditions, higher strength Spansule capsules may be necessary.) When 24-hours therapeutic effect is desired, the morning dose should be repeated in the late afternoon or in the evening.

Dosage Form: 30 mg. (1 dot on capsule), 75 mg. (2 dots on capsule), 150 mg. (3 dots on capsule), and 200 mg. (4 dots on capsule, in bottles of 30 and 250.

Also Available: Tablets: 10 mg., 25 mg., 50 mg., 100 mg., and 200 mg.

Ampuls: 25 mg. (1 cc.) and 50 mg. (2 cc.)

Suppositories: 25 mg. and 100 mg.

Source: Smith, Kline and French Laboratories.

DARVON

Description: A new non-narcotic analgesic, Darvon is Dextro propoxyphene hydrochloride and has the chemical name of a-d-4-0 dimethylamino-1, 2-diphenyl-3-methyl-2-propionoxybutane hydrochloride.

Indications: Darvon is indicated for the reduction or amelioration of all types of pain, particularly those associated with chronic or recurrent disease. 'Darvon Compound,' a combination of 'Darvon' and 'A.S.A. Compound' (Acetylsalicylic Acid and Acetophenetidin Compound, Lilly), provides antipyretic and anti-inflammatory activity as well as greater total analgesic effect. Therefore, 'Darvon Compound' is indicated for the relief of pain associated with such conditions as: premenstrual cramps, dysmenorrhea, muscular pains, arthritis, neoplastic diseases, headaches, bursitis, traumatic pain and vascular disease. Nausea, vomiting, and other gastrointestinal disturbances, frequently observed side-effects with codeine, are minimal with Darvon; therefore, larger doses of Darvon may be successfully administered.

Dosage: Darvon Alone: 32 mg. every four hours or 65 mg. every six hours as needed for pain. Darvon Compound: 1 or 2 pulvules every six hours as needed for pain.

Dosage Form: Pulvules Darvon 32 and 65 mg. are supplied in bottles of 100. Pulvules Darvon Compound (Darvon B2 mg.) acetophenetidin 162 mg., acetylsalicylic acid 227 mg. and caffeine 32 mg.) are supplied in bottles of 100 .

Source: Eli Lilly and Company.

TETREX PEDIATRIC CAPSULES

Description: Capsules containing the tetracycline phosphate complex, Tetrex, equivalent to 100 mg. of tetracycline hydrochloride activity.

Indications: Recommended for treatment of

varied infections of bacterial, rickettsial and certain viral origins.

Dosage Form: Marketed in bottles of 25 and 100.

Source: Bristol Laboratories.

TETREX APC WITH BRISTAMIN

Description: Capsules containing 125 mg. of tetracycline activity as the phosphate complex, 150 mg. of aspirin, 125 mg. phenacetin, 30 mg. caffeine and 25 mg. phenyltolxamine hydrobromide (Bristamin).

Indications: Indicated in the relief, prevention or treatment of respiratory infection complications.

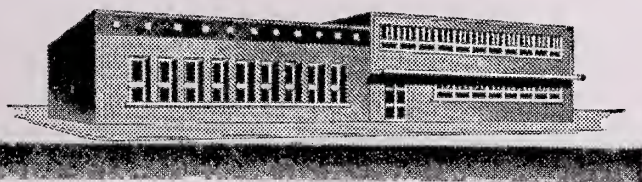
Dosage Form: Bottles of 24 capsules.

Source: Bristol Laboratories.

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INSURANCE COMPANY OF IOWA

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Help Insure A Merry and Profitable Christmas
By Exercising Care and Caution
While Installing Store Holiday Trim & Decorations

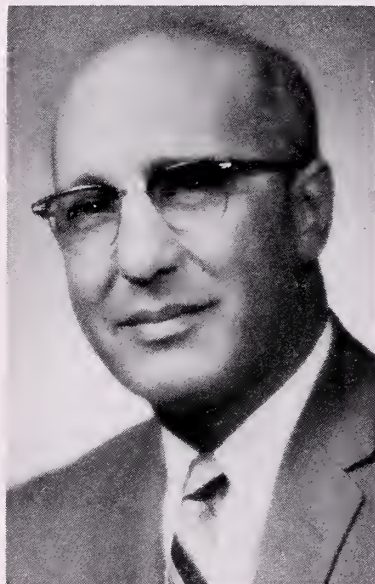


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Rx PHARMACY

News



TOM HAGGAR APPOINTED TO BOARD OF PHARMACY

The appointment of T. K. Haggar to the South Dakota State Board of Pharmacy was recently announced by Governor Joe Foss. Mr. Haggar will serve out the unexpired term of Milford Schwartz who passed away in August. Well-known to South Dakota pharmacists, Haggar has served in many capacities in the State Pharmaceutical Association and on the State Board. His most recent assignment was a member of the association's interprofessional relations committee — a position he has relinquished due to his

board activities. Mr. Haggar is the owner and manager of the Haggar Drug Store in Watertown.

BOARDS AND COLLEGES MEET AT OMAHA

The annual meeting of District V, National Association of Boards of Pharmacy and American Association of Colleges of Pharmacy was held October 27-29 at the Sheraton Fontenelle Hotel, Omaha, Nebraska.

Approximately 50 board members and pharmacy faculty were present. The states of South Dakota, North Dakota, Nebraska, Iowa and Minnesota and the seven colleges of pharmacy at North Dakota Agricultural College, South Dakota State College, University of Nebraska, Creighton University, State University of Iowa and the University of Minnesota sent delegates.

Those representing the South Dakota State Board of Pharmacy included **Bliss C. Wilson**, Secretary; **Harold Mills**, Rapid City; **Harold Tisher**, Yankton; **Tom Haggar**, Watertown; and **Glen Velau**, Inspector, Sioux Falls.

Delegates from the Division of Pharmacy at South

Dakota State College were **Guilford C. Gross**, Professor and Head of the Department of Pharmacology and **Winthrop Lange**, Assistant Professor of Pharmacy.

PHARMACY ENROLLMENT

Fall quarter enrollment in the Division of Pharmacy, South Dakota State College totals 240 according to D. B. Doner, Director of Admissions and Records.

The figure is slightly lower than last year when 257 students were enrolled.

Registration by classes shows 52 freshmen, 53 sophomores, 70 juniors, 64 seniors, one special and one graduate student.

Men students number 201 and 39 women students are registered. Female enrollment by classes totals 11 freshmen, 9 sophomores, 12 juniors, 6 seniors and one special student.

WOMEN'S AUXILIARY SUPPORTS PHARMACY STUDENT GROUP

A gift of \$150.00 was recently presented by the Women's Auxiliary of the South Dakota State Pharmaceutical Association to the Kappa Epsilon Pharmaceutical Frater-

nity at State College.

Given to support the work of the group among women students in pharmacy the grant was made to Mrs. Guilford C. Gross, Faculty Advisor, by Mrs. E. R. Serles, a Past President of the Auxiliary.

Kappa Epsilon is a women's pharmacy fraternity with the stated objectives of promoting scholarship and the attraction of women to the profession. Undergraduate requirements for membership are at least a "C" average and sophomore standing.

NORTH DAKOTA DEAN DEAD AT 72

Nearly a half-century of service to pharmaceutical education and the profession of pharmacy in North Dakota came to an end October 1 with the death of Dr. William F. Sudro. Dean Sudro came to the North Dakota Agricultural College in 1907 and was associated with the school of pharmacy at that institution until his retirement in 1955.

Born in Elyria, Ohio, November 15, 1884, he attended the University of Illinois and the University of Michigan where he received the degree of Bachelor of Science in 1906. In the summer of 1907 he accepted a position as instructor at NDAC together with the position as assistant chemist in the food and drug commissioner's office. While in this position he developed standards for motor fuels and the methods he used later formed the basis of laboratory control on these products. Also during

the 10 year period when he was associated with this department, North Dakota maintained leadership in the field of food and drug regulation and Dean Sudro as an assistant met with practically all of the legitimate and illegitimate drugs then on the market.

He was soon promoted to a full professorship. When he first came to the school the pharmacy department was merely part of the chemistry department but in 1919 it was formed into a new school with Dr. Sudro as its head. In 1926 he was promoted to dean.

For work carried on through the University of Wisconsin, he received the degree of Master of Science in 1918. Active in the North Dakota Pharmaceutical Association, he was secretary of the organization from 1920 to 1934.

He was also active in the work of the Northwest Pharmaceutical Bureau and after 1929 he was a contributing editor of the Northwestern Druggist published in Minneapolis.

An active worker in the Presbyterian Church, he had been a member of the Masonic Lodge; York Rite Bodies; the Shrine; the North Dakota Academy of Science; American Association of University Professors; Sigma Alpha Epsilon; Phi Kappa Phi; and Rho Chi.

PHARMACY PROFESSOR RECEIVES RESEARCH GRANT

A research grant of \$2,295.00 has been awarded to Winthrop E. Lange, Ph.D.,

Assistant Professor of Pharmacy at South Dakota State College, President John W. Headley has announced.

The grant is from the U. S. Department of Health, Education and Welfare, Public Health Service, National Institute of Arthritic and Metabolic Diseases. It will cover the expense of a half-time graduate assistant and research equipment.

Dr. Lange's research concerns new chemical agents for the study of diabetes. Aim of the project is to prepare new synthetic chemicals which will be used to study the cause of diabetes, he said.

PHARMACY SCHOLARSHIPS GRANTED

Scholarships in the field of pharmacy have been awarded at South Dakota State College to twelve persons. Announcement of the awards was made by Floyd J. LeBlanc, Dean of the Division of Pharmacy.

Named winner of the C. A. Locke scholarship in pharmacy was Faye Stephens, Belle Fourche, while scholarships from the Lewis Drug at Sioux Falls, went to Thelma Downard and Donalene Larson, both of Sioux Falls. Miss Stephens and Miss Larson are both junior pharmacy students at State College and Miss Downard is a member of the incoming freshman class. All of the scholarships were for \$108, covering the cost of tuition for one college year.

Terrie Ann Teuber, a sophomore pharmacy student from Redfield, was named the recipient of the Osco

scholarship for a year's tuition and fees, while a similar scholarship was presented by the Walgreen company to Eugene Rezac, junior pharmacy student from Highmore.

Scholarships which had previously been presented and were renewed for the 1957-58 college year, included an Osco Drug scholarship to Merle Amundson, Colton, a Walgreen scholarship to Dewey Folkestad, Montevideo, Minnesota and a Pepsodent scholarship to Larry Detmers, Canton.

Two other members of the incoming freshman class, Sharon Mix, Brookings, and Malda Spolans, Nunda, who had been previously named to receive State College scholarships, were designated to receive scholarships in pharmacy. Miss Mix was awarded a tuition scholarship from the South Dakota Pharmaceutical Association, while Miss Spolans was named winner of a \$500 scholarship for four years of study by the Pepsodent Company.

Two awards of \$200 each are made by the American Foundation of Pharmaceutical Education to outstanding Junior or Senior pharmacy students. This year the awards were granted to Mary Vande Voorde, Chamberlain, and Kenneth Weber, Murdo. Miss Vande Voorde is a junior student and Mr. Weber is a senior student in the Division of Pharmacy. The winners are to be known as "Scholars of the American Foundation for Pharmaceutical Education" and are required to maintain at least a

"B" average in all of their college work.

BROOKINGS OBSERVES NATIONAL PHARMACY WEEK

Teamwork between Brookings pharmacists and the faculty of the Division of Pharmacy, South Dakota State College resulted in a concerted public relations program during National Pharmacy Week October 6-12. Featuring the theme "Your pharmacist works for better community health," members of the profession used every available public relations media to acquaint the public with some of the lesser known responsibilities of pharmacy as a member of the public health team.

A one-half hour broadcast over station KBRK October 6 started the weeks activities. This was followed by 15 minute daily broadcasts during the week. Editorials, advertisement space and news articles appeared in the news media covering Brookings County. National Pharmacy Week displays appeared in each of the registered pharmacies in Brookings and the profession was discussed at luncheon meetings of the Lion's Club and the Student Branch of the American Pharmaceutical Association.

PHARMASCOOPS

Art Jarratt of Colman recently did relief work for W. N. Walker of Elkton and Delos Casey of Madison.

Walker went antelope hunting on his vacation and Casey was the Brookings Area Pharmaceutical Society representative to the National Association of Retail Drugists Convention in Minneapolis. Also in attendance at the convention was **Chan Shirley**, Brookings; **Harold Tisher**, Yankton; **Murray Widdis**, Sioux Falls; **Vere Larsen**, Alcester; **John Sidle**, Alexandria; **Harold Mills**, Rapid City; **Alger Knutson**, Clark; and **Fred Vilas**, Pierre.

Larry Wallbaum, Yankton, has discontinued the City Drug Store as a registered pharmacy and converted it into a sundries store.

Jerome Shroll, SDSC 1956, is working for **Wayne Shanholtz** of the Kress Drug, Mitchell.

O. F. Allbright is managing the Petersen Drug in Rapid City for **M. C. Beckers**.

Donald L. Petersen, Rushmore Drug in Rapid City has been confined to a hospital in Rochester, Minnesota.

Vacationing pharmacists whose paths crossed on Mount Rushmore recently were the **Tom Mills**, Mills Pharmacy, Sioux Falls; **Andy Olsons**, Mills Drug, Rapid City and **Glen Velaus**, State Board Inspector, Sioux Falls.

Lt. Ronald Rames, SDSC 1956, now stationed at Fort Leonard Wood, Missouri, is the proud father of twin baby boys. Lt. Rames is Medical Supply Officer for the medical units at the camp.

Glen Himrich, SDSC 1954, was a recent visitor to the Division of Pharmacy. Glen is a pharmacist at the Village Drug Store, Orange City, Iowa.

C. S. BOBB, M.D.

1876—1957

Dr. C. S. Bobb, 80, retired Mitchell surgeon, died at a Mitchell hospital late Wednesday evening, October 16th, following a lingering illness. He had been hospitalized since early in August.

Clyde Schuyler Bobb was born in Richland Center, Wisconsin October 28, 1876, the son of Martin and Mary Bobb, pioneers of Wisconsin and later of Dakota Territory. When C. S., as he was lovingly called by friends and relatives, was five years old the family settled on a homestead nine miles west of Mitchell, and here C. S. grew to manhood, attending public schools and Dakota Wesleyan University from which he was graduated in 1897. He taught school for two years, and then entered Barnes Medical College, now affiliated with Washington University, St. Louis, Mo. Upon graduation in 1905, he received the distinguishing citation of his class for medical diagnosis.

On June 26, 1906, he was married to Emma Bell Haynes, a teacher of Mitchell High School. To this union were born four children, Margaret Mary Hughes of Pasadena, Calif., Eleanor Jane Nissen, Albuquerque, N. M., Edward C. Bobb, who preceded his father in death on Sept. 5 of this year, and Charles Haynes Bobb of Rapid City.

Dr. Bobb was one of Mitchells earliest practitioners, entering partnership with his brother, Dr. B. A. Bobb upon completion of his Medical education in 1905. His brother already had been practicing in Mitchell for seven years. Later he restricted his practice to surgery.

Dr. Bobb was well known in Medical circles. He was a member of the American Medical Society, the South Dakota Medical Society, served as president of the staff of the Methodist State Hospital and St. Joseph's

Hospital at various times, as a district president of the Mitchell district Medical Society, as railroad surgeon for the Northwestern Railway and as a member of the Mental Illness Board, in which capacity he served until his death.

He and his brother, Dr. B. A. Bobb, were largely responsible for the establishment of the Methodist Hospital in Mitchell. Together they played an active part in establishing the hospital and the Methodist Hospital School of Nursing.

In 1955, he received the 50-year pin from the State Medical Society for 50 years as a physician surgeon in South Dakota. In 1956 he received a 35-year service Kiwanis pin and in June of this year, he received a 60-year citation award from Dakota Wesleyan University for distinguished community service. He was a member of the Kiwanis Club and Chamber of Commerce.

Through the years 1945 to 1948 he served as a member of the Military Board of Selective Service for which he received a plaque.

Upon completion of the Medical training of the late Dr. E. C. Bobb, he entered the firm of his father and uncle, Drs. Bobb and Bobb, and it became known as Drs. Bobb, Bobb, and Bobb. When Dr. B. A. Bobb retired to go to California in 1945 Drs. C. S. and E. C. formed a father-son partnership, which again became Drs. Bobb and Bobb. With the retirement of Dr. C. S. Bobb in 1949 and the recent death of Dr. E. C. Bobb in September of this year, was brought to a close an era of 63 years of practice for a Dr. Bobb in Mitchell.

He is survived by his widow, three children, eight grandchildren, one brother Dr. B. A. Bobb of Monrovia, Calif., and two sisters Mrs. Dora Rockwell and Mrs. F. T. Erickson of Hollywood, Calif.



TRAUMATIC AXILLARY ANEURYSM;
SURGICAL TREATMENT AND SIX YEAR
FOLLOW-UP
CASE REPORT*
PAUL C. REAGAN, M.D.
and
ROBERT E. VAN DEMARK, M.D.
SIOUX FALLS, S. DAK.

Traumatic axillary aneurysm occurs infrequently in civilian life. When compared with most aneurysms it is of more than average interest, because of the almost invariable association with an extensive brachial plexus injury. We would like to present a patient on whom we operated 6 years ago. This patient illustrates an excellent surgical result which may be obtained in this type of lesion.

CASE REPORT

A white female, age 24, was admitted to Sioux Valley Hospital on the 26th of July 1950 following a gun shot wound of the right shoulder. Her chief complaints were pain in the right shoulder and numbness of the right arm and hand. She gave a history that while cleaning her house she moved a 22 calibre rifle which accidentally went off, striking her in the right shoulder. Following this, she was unable to move her arm and the pain in the shoulder was very intense. Examination showed a perforating wound of the right shoulder with wounds of entrance and exit. The right arm showed anesthesia in the right median and radial nerve distributions where

there was total motor paralysis. X-ray of the right shoulder was reported as follows: "There is a stipple density superimposed on the right axilla which may represent foreign material in the soft tissues. No bony lesions are demonstrated. A small amount of air is present. Impression: Metallic foreign bodies and soft tissue emphysema." Examination of the blood revealed a white count of 16,500 with 88% segmented leukocytes. The urine was normal. Patient was treated conservatively with antibiotics without complicating infection. She was discharged on the 31st of July, 1950. At the time of dismissal she was still having some shoulder pain. There was numbness in the arm and hand, except for the fourth and fifth fingers. A protective splint was applied to the hand.

The patient continued to gradually improve in arm and shoulder motion, but there was residual weakness in the distribution of the median and radial nerves. A palpable deep scar was checked at regular intervals. It was not until June, 1951 that a systolic bruit appeared and the mass was definitely pulsating, deep in the axilla. A diagnosis of aneurysm was made (by P.C.R.).

The patient was readmitted to the hospital

*Patient presentation — Surgical Staff Meeting.
Sioux Valley Hospital, May 28, 1957.

on the 21st of June, 1951. On June 22, 1951 the aneurysm was exposed anteriorly (by R.E.V.). There was marked fibrous-tissue reaction about the aneurysm. The two heads of the median nerve came across the front of the aneurysm and the nerves of the posterior cord of the brachial plexus was flattened on the back of the aneurysm. A bipolar extirpation was performed after carefully dissecting the aneurysm out from the adjacent nerve structures without rupture. One pint of blood was given during the procedure though more were available. The patient's postoperative course was uneventful and she was discharged from the hospital on the 26th of June 1951. The pathological report of the fixed specimen was as follows: Gross description — "There is a thick wall opaque cystic structure measuring 34 x 20 x 19 mm. At the two margins there is a tubular structure which communicates with the systic cavity. Microscopic description — Cystic structure is lined by endothelium. The surrounding wall is much thickened by fibrosis. There is no elastic layers. The cystic space communicates with a segment of artery showing well preserved intima as well as elastic and muscular coats. Diagnosis: Traumatic anerysm."

Postoperatively, the skin sutures were removed at the end of two weeks and shoulder and arm motions were gradually resumed. The hand was again splinted to protect the weakened muscles. Improvement continued

and by November, 1951, the patient had recovered almost complete function in the median and radial nerves. The pulse has subsequently returned to the wrist; although weaker than the other side, it is palpable. The arm aches mildly in cold weather. The patient now has a complete return of motor and sensory function in the arm and hand. There is no muscle atrophy. (Figs. 1, 2)

DISCUSSION

Aneurysms are found less frequently in the upper extremity than in the lower. Neurological symptoms are commonly associated with an axillary aneurysm and may not clear up until the aneurysm is treated surgically, as was noted in this case. Extirpation of the aneurysm is usually a safe procedure in the upper extremity; Janes and Ghormley² of the Orthopaedic section of the Mayo Clinic have pointed out that "any artery in the upper extremity may be ligated with more or less impunity." In a traumatic aneurysm a delay of two to three months is advisable in order to permit the establishment of collateral circulation; the collateral branches should be carefully preserved at the time of dissection of the aneurysm.

REFERENCES

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2. Janes, J. M., Ghormley, R. K.: *Sequelae of Vascular Injuries*. *Am. J. Surg.* 80: 799-804, Nov. 15, 1950.

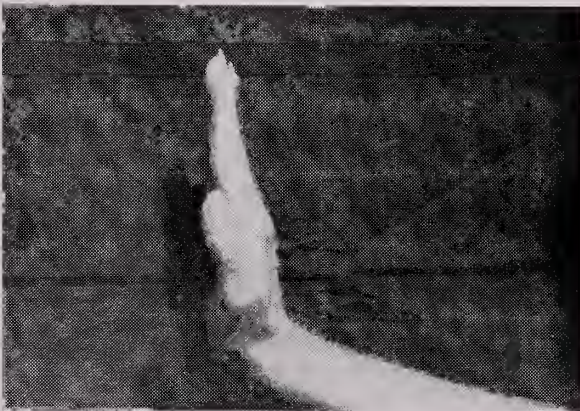


Fig. I. Complete return of radial nerve function occurred where total paralysis was present at time of injury.



Fig. II. The atrophy and paralysis of the thenar muscles supplied by the median nerve entirely disappeared.



THE MANAGEMENT OF THE INFERTILE COUPLE*

Nicholas W. Fugo, Ph.D., M.D.

From the Department of
Obstetrics and Gynecology
The University of Chicago and
The Chicago Lying-in Hospital

While the problem of the infertile couple is usually relegated to the specialist in obstetrics and gynecology it is more truly a problem best dealt with by the family doctor. I say this because the problem of infertility in its broadest aspects is more than a series of diagnostic tests and requires a thorough knowledge of family relationships and psychiatric factors. We do not have time today to delve into this aspect of the problem which is so important and yet so nebulous that it is consequently poorly understood. For these reasons we shall remain on firmer ground and confine our remarks to those factors which can be discovered and controlled by careful physical examination and laboratory investigation.

It is interesting to note that in any series of infertility patients conception will follow within six months following the first visit to the doctor in over 60% of the patients seen provided there is no pathology which makes fertilization impossible. The largest number of patients will conceive within the first month following examination and approximately 80% will conceive within the first year.

The age of the female patient is of great importance in matters of fertility. The

most fertile woman is the young woman. The usual age of the menarche of girls in this country is between 12 and 14 years of age. These girls are as a rule having anovulatory cycles for the first 2 or 3 years of their menstrual life. As maturity progresses the menstrual cycles become more frequently ovulatory in nature. A more specific and characteristic cycle for that particular individual is established so that by the age of 17 or 18 ovulatory cycles are the rule and exposure frequently results in conception. Another factor to be considered is that this is the period of life most devoid of pelvic pathology. Pelvic inflammatory disease is not likely to have occurred with subsequent tubal blockage. Endometriosis has not yet gained sufficient foothold to result in sterility. Infections of the cervix are not common with resultant abnormal cervical mucus hostile to sperm migration. Tumors such as leiomyomata are not apt to be of sufficient size to cause abnormalities in the endometrium and interfere with nidation.

As age progresses fertility declines so that at the age of 35 years an average exposure time of approximately $3\frac{1}{2}$ years is required for conception. In the history of the Chicago Lying-in Hospital there have been no women over 48 years of age who have been delivered of a normal baby.

*Presented at the 76th South Dakota Medical Association annual meeting.

The age of the male in regard to fertility is not so important. Men have sired children in their seventies.

It is also of interest to note that conception in the infertile couple does not insure a full term gestation. It is generally accepted that approximately 10% of all known pregnancies result in abortion. In the infertile couple the known abortions amount to about 20-25%. This is about twice the number encountered in the average obstetrical practice. The reason for this observed fact is unknown.

The incidence of ectopic pregnancies in the infertile couple is also increased. The incidence of ectopic pregnancy is usually given as 0.5%. In the infertile women the incidence is approximately three times as high (1.7%). The factors responsible for ectopic pregnancy are undoubtedly the same as those resulting in infertility, namely, congenital anomalies of the Fallopian tubes or abnormalities of oviducts resulting from salpingitis.

The etiology of infertility in the female is multiple. Tubal factors are important. Obstruction of the Fallopian tubes either unilateral or bilateral probably constitutes the greatest single deterrent to conception in the female. These conditions are due to salpingitis usually initiated by gonococcal infections. Surgery is the only hope for the woman with bilateral tubal obstruction. And at best this is only successful in restoring potency in less than 20% of the reported cases regardless of the method employed.

Hormonal factors are also of importance. Irregular periods with infrequent ovulations are deterrents to conception as are anovulating cycles. Therapy for these conditions is unsatisfactory for the most part. Perhaps the most beneficial hormonal substance in problems of infertility today is thyroid. Many patients who have failed to have children after years of marriage will promptly conceive when administered relatively small doses of thyroid. I do not mean to imply that these patients are hypothyroid. They are euthyroid. We have no logical explanation for this phenomena but clinical observations have demonstrated this many times. Animal experimentation has indicated that ovulation results from thyroid administration. It is believed from animal studies that thyroid administration increases gonadotropin secretions.

Male factors in infertility may be im-

portance of either organic or psychic origin. Deficiencies in semen specimens are also of major importance.

There is a relatively large group of patients in which no organic etiological factor responsible for sterility can be demonstrated. These are the patients where the greatest amount of diagnostic acumen and understanding of emotional factors is of utmost importance.

Any investigation of an infertile couple requires a complete history and physical examination of both husband and wife. Sexual habits of the couple should be inquired about and any aberrations corrected. Laboratory work including serology, complete blood count and urine analysis should be done. The complete physical examination is utmost in importance. It is not judicious to embark on a sterility work-up in a patient suffering from some serious organic disease. Most infertility patients are young people who have not seen a physician in years. I can well remember a young woman who came to the infertility clinic for study and who was found to have a markedly elevated blood pressure. No work-up was attempted but she was immediately referred to the renal vascular disease clinic. She failed to keep her appointment but was admitted in coma a few days later with hypertensive encephalopathy.

Basal metabolism should be determined and euthyroid patients can be given thyroid in dosage up to 120 mg. per day. Greater care must be exercised in dealing with patients suffering from true hypothyroidism since these individuals are extremely sensitive to relatively small doses of thyroid and may, unless one is extremely cautious, develop symptoms of thyrotoxicosis.

Semen examination is of importance. This should be examined in regard to volume, number or sperm per cu. mm, motility of spermatozoa, and percentage of abnormal forms. Recent studies have shown that the quality of sperm specimens is of more importance than volume or number of spermatozoa. We formerly considered any specimen which contained 60 million sperm or more per cu. mm. as normal but more recent figures indicate that 20 million sperm per cu. mm. is acceptable as a fertile specimen. In our experience we have seen many couples conceive whose sperm count on several occasions never exceeded 4 million per cu.

mm. And still more curious is the patient with azoospermia who becomes a father not once but several times. It is never wise to inform a couple that the husband is completely sterile. Most important is to realize that sperm counts vary greatly from time to time. Testicular biopsy should be included as part of the husband's work-up when examination of the seminal fluid reveals azoospermia.

Hysterosalpingography is an essential part of a sterility work-up. It is necessary to determine the condition of the Fallopian tubes before any statement can be made regarding the reproductive potential of any couple. There are several methods that can be utilized. We prefer the hysterosalpingogram over the Rubins' test for several reasons. In the first place a picture of the uterine cavity and the oviducts is obtained. This will visually demonstrate any pathology; tumors or polyps in the uterine cavity. It will also demonstrate chronic salpingitis. This is not possible with carbon dioxide insufflation. It will show the size and conformation of the uterine cavity and will demonstrate defects in the lower uterine segment in the region of the internal os. Rubin tests are useful as therapeutic measures however. Conception commonly follows tubal insufflation.

Endometrial biopsies are of limited value in a sterility work-up. They will determine the type of endometrium present but as has been demonstrated by Bartelmez, several different stages of proliferative or secretory endometrium can be obtained from the same uterus at the same time. Essentially the same information can be obtained by examining a well-kept basal body temperature chart. The endometrial biopsy is important however in cases where it is necessary to determine if a reactive endometrium is present.

There are other miscellaneous tests which will give additional bits of information. The examination of the cervical mucus following coitus (Huhner test) will demonstrate viable spermatozoa present in the cervical canal — the most favorable site for deposition of sperm.

Much has been written about vaginal and cervical pH. The vagina is normally 4.5 and the cervical secretions about 9. We feel that the correction of cervical pathology such as erosions and the correction of vaginal flora

will automatically correct and maintain a normal pH of both the cervix and vagina.

Perhaps one of the most valuable diagnostic and therapeutic aids in any sterility study is the Basal Body Temperature graph. If the patient is instructed properly a good deal of information can be obtained. The patient is instructed to take oral temperatures immediately on awakening and to allow the thermometer to remain in the mouth for 5 minutes. If the patient is capable of reading an ordinary Fahrenheit thermometer considerable data can be obtained over a period of several months. The basal temperature will indicate if ovulation occurs. It will determine with fair approximation ovulation time, it will give information regarding the sexual habits of the couple and lastly it can be used quite successfully either as an index of approaching menses or as test of pregnancy.

Examination of cervical mucus as part of a sterility work-up will give additional information on the reproductive potential of the wife. At the time of ovulation the mucous discharge from the cervix should be increased in amount; microscopic examination should reveal it to be free of leucocytes; and it should have dry content or less than 5%. The spinnbarkeit is between 10-20 centimeters. These are the conditions which are optimal for the migration of the sperm through the cervix and into the uterus and tubes.

There is a small but important group of women who present themselves to the physician as infertility problems with the symptoms which lead to a diagnosis of ovarian failure. These women require careful study and in many cases when this done the results are rewarding. Ovarian failure can have three different etiologies. It can be primary, that is the defect lies in the adnexae themselves. This can be physiologic such as the menopause, or induced by irradiation. It may be due to failure of embryological development (aplasia) or it may have an unknown etiology such as found in polycystic ovaries of the Stein-Leventhal Syndrome. Of these conditions the only one which can be treated successfully from a sterility viewpoint is the syndrome of polycystic ovaries. Once this diagnosis is definitely established excellent results have been obtained with wedge resection of the ovaries. The reason for this suc-

cess has not yet been explained satisfactorily.

The diagnosis of primary ovarian failure can most simply be diagnosed by the determination of urinary gonadotropins. These individuals have a high titer. If the estrogen titer is determined it is found to be low or entirely absent. There is little that can be done to correct this deficiency although occasional success has been obtained through the use of cyclic therapy. The rationale being that by the administration of sex hormones the pituitary gland is inhibited cyclically and the pituitary cycle which has been disrupted by the failure of ovarian function is resumed.

More difficult to treat successfully at present are the ovarian failures due to pituitary dysfunctions. The ideal method would, of course, be therapy with pituitary hormones but this has not been in reach of the clinician although experimental use has been achieved with some success. These can be patients who are suffering from Simmons disease or Sheehan syndrome. These cases can be diagnosed by the presence of little or no pituitary gonadotropin in a 24 hr. urine specimen. In these cases general endocrine substitution will give the best results but the prognosis as far as fertility is concerned is extremely poor.

There is still another group of women who are occasionally encountered in the infertility clinic who present the picture of adrenogenital syndrome. They are usually obese with excessive hirsutism, male escutcheon and frequency acne. Laboratory and chemical studies will demonstrate a normal BMR, the temperature graph will exhibit anovulatory periods. Twenty-four hour urine specimens will show elevated 17-ketosteroids. The administration of cortisone will depress the secretion of ACTH from the pituitary and consequently decrease the output of 17-ketosteroids which in turn will permit the ovarian cycle to resume a normal course and ovulation will ensue.

In the foregoing brief presentation I have attempted to outline in a concise simple manner the necessary diagnostic steps and touched lightly on therapeutic means of combatting the problem of infertility. Much has been left unsaid but if the procedures men-

tioned are followed along with an understanding of the emotional and psychic needs of the infertile couple the physician will have many grateful patients.

"MEDICLINICS" SET FOR FLORIDA

MEDICLINICS third annual postgraduate refresher course will be held in Fort Lauderdale, Florida, March 2-12, 1958.

The American Academy of General Practice has certified this course for 32 hours of formal postgraduate study — Category 1 — for those Academy members in attendance.

The course consists of 32 hours of lectures and panels conducted by a faculty well able to present the varied subjects in the several fields of medicine. A review of the preliminary program herewith enclosed will more adequately describe the educational scope of MEDICLINICS for 1958.

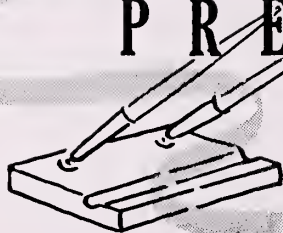
The program also lists seven (7) luncheon meetings in addition to the 32 hours of lectures and panels. Attendance at the luncheons is optional and will be limited to forty (40) participants in order to stimulate informal discussion of the subject. The cost of each luncheon is \$2.50 per plate.

The experience gathered in 1956 and 1957 requires that we limit registration to 300 in order to preserve the informal and intimate atmosphere in the lecture room. Inasmuch as this course occurs at the height of the tourist season, we have been strongly urged to adhere to this limit by the Fort Lauderdale Chamber of Commerce.

We have every assurance that 300 doctors and their wives can be comfortably accommodated in Fort Lauderdale at the peak of the tourist season if reservations are made well in advance.

The tuition fee for the course is \$50.00 payable in advance. Your check should be made payable to MEDICLINICS and mailed to the above address. We suggest that you do this promptly as registration will be closed when our limit is reached. If you plan to attend any of the luncheon meetings, please indicate your preference and add to your fifty dollar (\$50.00) tuition fee an additional \$2.50 for each luncheon meeting you have selected.

P R E S I D E N T ' S P A G E



Merry Christmas and Happy New Year

To all the Doctors and your families I send my sincere greetings.

In these uncertain times, with Russian Satellites orbiting in the outer space and with the threat of intercontinental ballistic missiles we must be thankful that we are still free and privileged to observe the Holiday Seasons as we choose.

Let us be aware of our freedom and enjoy to our utmost the happiness of the Season.

M. M. Morrissey, M.D.

Pierre, S. Dak.

TEST YOUR INCOME TAX I. Q.

TEST YOUR TAX I.Q.

Test your knowledge of the federal income tax law on this quiz prepared by the American Institute of Certified Public Accountants in cooperation with the Internal Revenue Service. You will find the correct answers on page 487.

1. During the past year you spent approximately \$1,000 for built-in bookcases and wall-to-wall carpeting for your office. Since your lease has only four years to run, you may . . .
 - (a) Deduct the \$1,000 on your 1957 tax return
 - (b) Amortize the cost over the next four years
 - (c) Depreciate it over the life of the furnishings
2. When you were transferred to another city, your company gave you a sum of money toward the cost of moving you and your family. For tax purposes you should consider this money as . . .
 - (a) A gift that is not taxable
 - (b) Income that is subject to tax with a deduction for only your personal moving expenses
 - (c) Income that is subject to tax with a deduction for the cost of moving your entire family
3. You have invested in several blue-chip stocks. The dividends received from this investment are exempt up to . . .
 - (a) \$50 whether you or your wife owns the stock
 - (b) \$100 if the stock is held jointly by you and your wife
 - (c) \$100 regardless of who owns the stock, providing you file a joint return with your wife
4. You are **not** permitted to deduct as contributions your donations to which of the following organizations . . .
 - (a) Charitable societies
 - (b) Educational institutions
 - (c) Political parties
5. Your daughter, who was hospitalized for several weeks in the earlier part of 1957, was married in November. If she files a joint return with her husband, you may . . .
 - (a) Not claim her as a dependent but you may deduct her medical expenses
 - (b) Claim her as a dependent and deduct her medical expenses
 - (c) Not claim her as a dependent and you may not deduct her medical expenses
6. You filled very few inside straights during the past few months and lost approximately \$300 to the members of your Thursday night poker club. You should . . .
 - (a) Deduct the loss in computing adjusted gross income
 - (b) Subtract the loss from adjusted gross income
 - (c) Give up poker and start watching television on Thursday nights
7. Last October your car skidded on a wet road and grazed a telephone pole. The damage was not covered by insurance and it cost you \$100 to have the car repaired. To claim a casualty deduction . . .
 - (a) You must have the damage repaired within 30 days of the accident
 - (b) You may simply deduct the amount of the repair bill
 - (c) You must prove that you were using the car in your work at the time of the accident
8. Which of the following may you **not** consider as a deductible business expense . . .
 - (a) A subscription to the AMA Journal
 - (b) Commutation fees
 - (c) The costs of attending the State Medical Association convention
9. While playing hide-and-seek in your backyard, the neighbor's children trampled and killed several of your expensive bushes. The cost of replacing this shrubbery . . .
 - (a) May be deducted if it does not exceed the original cost of the bushes

- (b) May be deducted only if the parents of the children refuse to pay damages
 - (c) May not be deducted under any circumstances
10. Your 16-year old son works during the summer for you in your unincorporated business, and you pay him a weekly salary. Since he is a full-time employee, he is . . .
- (a) Required to pay social security
 - (b) Not subject to social security
 - (c) Permitted to decide whether he does or does not want social security coverage
11. Last year you gave your church a small piece of property for which you had paid \$500 some time ago. Its value at the time of the gift was \$1,500. As a result . . .
- (a) You may claim a tax deduction of \$1,500
 - (b) You must pay a capital gains tax on the \$1,000 increase
 - (c) You may claim a tax deduction of \$500
12. There were a few leaks in the single roof of your office building; so you constructed a new tile roof. You should . . .
- (a) Consider this as a repair bill and deduct the entire amount as a business expense on your 1957 return
 - (b) Regard this as a capital improvement and depreciate the cost over a period of years
 - (c) Add the cost of the repair to the value of the property
13. After you have filed your personal 1957 tax return, the Government is allowed to check your return and bill you for additional tax. The period of time in which this may be done ends . . .
- (a) On the day you file your 1958 return
 - (b) Two years after you file your 1957 return
 - (c) Three years from the due date of your 1957 return
14. On the advice of a friend, you engage a CPA to prepare your 1957 tax return. The fee he charges for this service . . .
- (a) Not deductible since it is a personal expense
 - (b) Not deductible if you are entitled to a refund
 - (c) Deductible in full
- (Answers on Page 487)

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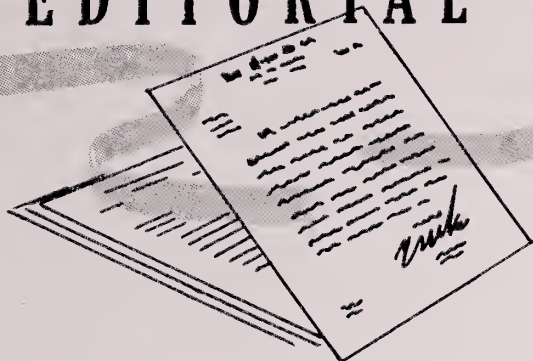
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EDITORIAL PAGE



Guest Editorials

ON HANDLING THE BEST

by

Pastor R. G. Borgwardt
First Lutheran Church
Sioux Falls, S. Dak.

Does Christmas really make a difference? We all know that it does with our schedules, our pocketbooks and our sagging energies. However, does it really make a difference where it really counts, in our mind and heart?

One of the most striking sentences in the Christmas Story is that little phrase which describes the journey of the Three Wise Men after they had been to Bethlehem to see the Christ Child. Matthew says that "they returned another way." I suggest that not only did the Wise Men take another route back to their country, but they themselves were different men because they had been to Bethlehem. They had worshipped the Christ. No man can do this and stay the same man! Permit me to suggest how this can be true today for us as it was for the Wise Men.

If we are to "return another way," **we must permit Christ to get into our thinking.** Religion must be more than a matter of sweet feelings nurtured by soft music. We must follow through with straight thinking about ourselves, our companions on this planet, and our God. Religion will wash away unless we root it in our mind. The Christian Gospel rings with great affirmations. Have you thought them through so that they are yours?

If we are to "return another way" we must do so **by turning over our desires and emotions to this King.** John Ruskin has said "tell

me what you like and I will tell you what you are." True Christmas worship purifies the whole man.

Finally, if we are to "return another" way from Christmas, **we can do so only by believing in our best moments.** As the years passed, I can imagine the Wise Men were tempted to discount Bethlehem. Had it not all been a fanciful dream? How tragically modern is this view. Pick up the best seller, listen to the philosopher — darkness is natural and light is unexpected, suffering is the norm and happiness is unnatural. Perhaps the Bethlehem of the Wise Men did fade. How about ours? Where are our ambitions, our dreams, our hopes of yesterday?

Many years later it is highly possible that these strange travelers of this first Christmas Eve heard of Jesus of Nazareth. They knew then that Bethlehem had been, real, not youthful fancy.

A. J. Cronins, great novel, "**The Citadel**" sketches in bold strokes, the life of a Doctor who had lost his ideals in his struggle for wealth and prominence. The author tells how after the death of his wife, the then middle aged doctor found pictures of himself in her purse. He was amazed to see that the pictures were of himself as a young man just starting out in practice. She had always viewed him at his best, the young man championing the ideals of his Bethlehem.

God has a picture of us at our best moments. We can catch a glimpse of it in the Christmas Story. He believes in that picture. He wants us to believe in it. It was said of the Wise Men that "they returned another way." Might it be said of us?

JUDAISM AND THE HEALING PROFESSION

by Rabbi Eugene Hibshman

Mount Zion Temple, Sioux Falls, S. Dak.

Throughout its long history the faith of Judaism has shown a vigorous concern about the physical as well as the mental, moral, and spiritual aspects of the human being. In its authoritative literature there is continually reiterated the religious necessity for personal hygiene, for cleanliness, and for sanitation in every phase of daily living.

The Old Testament and its supplement, the Talmud, recognize the relationship between cleanliness and the prevention and cure of disease. They contain various rules concerning health, preparation and consumption of foods, contagion, quarantine, leprosy and skin diseases, menstruation and circumcision.

Later Greek culture and especially the work of Hippocrates greatly influenced Jewish medicine in the ancient Near East. During the Middle Ages when much of Europe was in the throes of cultural darkness, Jews performed distinguished service in the field of medicine through their translations of medical tracts from Greek to Arabic. As a result medicine achieved a high status in Arabic Spain, center of knowledge in medieval times.

One of the greatest figures of Jewish history with the 12th century philosopher, Moses Maimonides, who was also, a distinguished Court Physician to the rulers of Egypt. He was the author of many outstanding works in which he manifested a rare combination of religious and medical knowledge.

It is in line with the finest Jewish tradition that many modern Jews have been professionally concerned with the various fields of medicine and medical research.

Today Judaism still believes, but even more emphatically, that although God is the Supreme Power in the universe, man should be His co-worker in fulfilling His Divine Plan. It places reliance, therefore, not alone upon God's help in preventing and healing illness, but also upon His devoted servants, the dedicated men and women of the medical profession and its allied fields.

SONS OF GOD

by Rev. L. J. Sullivan, Pastor

Church of Saint Mary

Sioux Falls, S. D.

God often chooses the weak to confound the strong. The hush of admiration that falls upon the world at Christmas time, the annual rebirth of charity among men, the almost stilling of the strident march of materialism, all this would seem to indicate that the strength of the world was confounded by the weakness of a Child in a crib. But in truth the world which seems to be strong is weak, and the child who seems to be weak is God.

He was in the world,
And the world was made by Him,
and the world knew Him not.

In these words Saint John tells us that the Child is the eternal and omnipotent God, who emptied Himself of the majesty that was His by right, taking the form of a servant and pitching His tent among those of the children of men. By the consent of the Blessed mother, and of her flesh He came into the world. Angels rejoiced. Surely not because He had become a man, but because God had begun to eradicate the evil that had taken root in His elect. Shepherds rejoiced. They might indeed, for they were witnessing the greatest moment in human history, greater than creation, the renewal of the integrity of man.

He was in the world,
And the world was made by Him,
And the world knew Him not.

These are the sad words, and they are still the sad words for after so many years there are still those who do not know Our Lord. But for those who came to know Christ Saint John reserves the joyous phrase.

To them he gave the power to be made the sons of God.

It is God who wants us to be His sons, and so it is. Christmas then marks the beginning of that intimate, personal union between God and man. Now He is one of us, so that we may be lifted up and become, saving only the limitations of human nature, like God himself. We are sharers in His Divinity.

Dues Payin' Time

Every December, District secretaries get down to the job of collecting dues from the Association membership. Time, too, for us to editorially say our two-bits worth.

It is hardly necessary to point to the fact that if dues for 1958 are paid before the end of 1957 they are deductible on this year's income tax. That is if you're looking for something to deduct. Most of us are looking for money to pay taxes. However many members like to pay up before January 1st.

Actually dues are due on or before the first day of the calendar year according to the Constitution and By-laws, but a grace period is granted before actual delinquency is pronounced.

Local dues are not set by the local district and vary from nothing to \$25.00 throughout the state. State dues are \$75.00 for active members, \$37.50 for men over 65 years of age and for government employees, nothing to persons on active military duty. AMA dues are \$25.00 per year. District and State dues are normally collected by your District Secretary, AMA through the State office.

An interesting fact about your dues — although the executive office of the Association through its many activities handles approximately one-third of a million dollars annually, only \$30,000.00 comes from dues.

THE MONTH IN WASHINGTON

Just how much money does the federal government spend on health programs and just how is it spent?

The answers are not easy to come by, but each year the Washington Office of the American Medical Association gathers together all of the bits and pieces of information needed to explain where and how the U. S. is involved in medicine, from cancer research to treating workmen's sniffles. Some of the material comes directly from appropriation bills, but where programs and projects are not identified there, the responsible government officials are consulted for the breakdown.

For all health and medical purposes, the U. S. during the current fiscal year is spending approximately two and one-half billion dollars. This — despite months of economy

talk in the administration and in Congress earlier in the year — is about the same figure as last year.

The survey also unearthed some interesting sidelights that show perhaps more graphically than the dollar marks the extent to which federal medical activities are spreading among almost all agencies and departments.

At least 23 U. S. cabinet departments and independent agencies are engaged in some medical operations, and there are at least 79 separate health-medical activities worthy of listing and describing. Many of these in turn are responsible for scores and scores of individual operations.

This year the relatively new Department of Health, Education and Welfare tops the list of all departments in health-medical spending with \$849,394,800, bounding past Veterans Administration and Defense Department, which up to now have been at the head of the column. VA is spending \$849,374,000, within \$20,000 of HEW, but Defense Department this year drops back more than \$80 million, to \$702,000,000, largely because the decreasing size of the armed forces means fewer uniformed men and dependents to care for.

Next comes Atomic Energy Commission, but its medical spending of \$40 million — mostly for research — is far down the column from the Big Three.

International Cooperation Administration has \$37 million to help our friends overseas to raise their medical standards. The other 19 departments and agencies have substantially less, the last item being the \$12,145 allocated to the physician entrusted with keeping members of Congress as healthy as possible.

For the first time the AMA report complies information on the programs in which the U. S. participates for payments because of disability. Among those receiving these payments are veterans, disabled beneficiaries under social security, disabled railroad workers, etc.

Because this money is not all federal and comes from several tax sources — OASI and railroad payroll deductions as well as general U. S. revenue — it is not added to other federal medical costs in the AMA study. For the current fiscal year the total of these "payments for disability" is about \$3.2 billion.

MEDICAL LIBRARY BOOKSHELF



Foreign Bodies in Esophagus and Tracheobronchial Tree

The unusual case of a 30 year old patrolman who, at the age of 18 years was operated on for empyema and, 12 years later, at a proposed lobectomy for bronchiectasis was found to have an almost intact surgeon's glove in his right lung was reported by Dr. R. R. Denicola in the J.A.M.A. v. 155, p. 1043, 1954. This glove, with the finger tips amputated and filled with gauze packing had been used as a means of empyemic drainage in the first operation. The hospital attendant in removing the final strip of gauze pack had inadvertently allowed the glove to drop into the chest cavity. Although a superficially healed wound enclosed the foreign body it later caused supperation with constant chronic constitutional symptoms and internal fistulization with pronounced recurrent respiratory symptoms. Removal resulted in complete and rapid healing.

A recent speaker at the first S.A.M.A. meeting of the year was Dr. Paul G. Bunker, otolaryngologist from Aberdeen. Dr. Bunker received his M.D. from Minnesota in 1929. He is a member of the American Academy of Ophthalmology and Otolaryngology. His son Tom is a second year medical student at this university. His topic was "Unusual foreign body experiences in the esophagus and tracheobronchial tree." The following is a resume of his talk as reported by Gilbert Den Hartog, chairman of the program committee of S.A.M.A.

Dr. Bunker began with a brief history of Otolaryngology noting a few of the prominent men in the field and some of the developments which have brought it up to its present state as a specialty of medical practice.

He then turned to the subject of foreign bodies listing several commonly encountered and pointing out special characteristics of each method of their removal and difficulties often met, and complications that may ensue from the presence of each one. Emphasis was placed upon the importance of each diagnosis and proper treatment and upon the prevention of more serious complications.

Following this Dr. Bunker presented several interesting cases selected from his years of experience illustrating them by means of photographic slides of the X-rays taken prior to treatment, and by demonstrating how the body is removed. Many additional points regarding the problems of foreign bodies were brought out during these case presentations.

Lastly Dr. Bunker demonstrated a method of removing an open safety pin which has largely solved this difficult problem, which he originated and has since written for publication.

In an article, "Long unrecognized foreign bodies in the air and food passages" found in Journal-Lancet Oct. 1947, p. 362 Dr. Bunker reports on two cases involving safety pins, one in the right main bronchus of a 40 year old woman of more than 35 years duration, and one in the hypopharynx of 3 months duration in an eleven months old baby. Both were removed successfully. In the latter case the anterior commissurescope was introduced and the open safety pin located in the pyriform sinuses. The pin was rotated around the tip of the anterior commissurescope using the Bunker technic. This technic is explained in an article published in Archives of Otolaryngology, v. 37, 1943 p. 78, 1943 entitled "Method of rotating the open safety pin in the esophagus." The principle involved is the

making use of the beveled end of the esophagoscope, both for the application of the forceps and for the rotation of the pin.

The esophagoscope is introduced in the usual manner until the keeper of the pin is sighted and then rotated thru an arc of 90 degrees, so keeper fills entire field. Application of forceps can be made at any point between keeper and ring of pin. Esophagoscope is rotated thru arc of 180 degrees reversing relative position of beveled end; downward pressure is brought to bear on keeper of pin with tip while traction is made with forceps. This rotates pin around beveled end of esophagoscope in which position it, with pin and forceps, can be withdrawn holding pin snugly against this beveled end.

Dr. Bunker states that vegetable foreign bodies in the tracheobronchial tree give rise to few symptoms and may easily be overlooked and cites two cases of watermelon

seeds found and removed. The tracheobronchial tree although tolerant to watermelon or sunflower seeds may react violently to beans, raw carrots or peanuts unless relieved bronchoscopically.

A very informative reference to this topic is found in a chapter by Paul H. Holinger and Kenneth C. Johnson in Part 1 of Pediatric Clinics of North America, Nov. 1954 entitled "Foreign Bodies in the Air and Feed Passages." This includes etiology, symptoms, pathology, diagnosis, and treatment with excellent illustrations included. According to their statistics, taken from 2043 cases, safety pins are found more often in children 7 months-2 years; peanuts from 15 months-4 years; coins 2-4 years; hardware 3-7 years and chicken bones in adults 30-70 years of age.

Mrs. Esther Howard
Medical Librarian

**SOUTH DAKOTA STATE MEDICAL
ASSOCIATION
MEMBERSHIP BY DISTRICTS**

DISTRICT	Active	Hon.	Mil.	Del. 1957	Total
DISTRICT I ABERDEEN	44	4			48
DISTRICT II WATERTOWN	20	1			21
DISTRICT III BROOKINGS	29				29
DISTRICT IV PIERRE	23	2			25
DISTRICT V HURON	25	3			29
DISTRICT VI MITCHELL	24	3	1	2	30
DISTRICT VII SIOUX FALLS	113	5		1	119
DISTRICT VIII YANKTON	39	3		1	43
DISTRICT IX BLACK HILLS	88	9	4		101
DISTRICT X ROSEBUD	8		2		10
DISTRICT XI NORTHWEST	9				9
DISTRICT XII WHETSTONE VALLEY	11	1	1	1	14
	433	31	8	5	477

**PAST GENERAL PRACTITIONERS
OF THE YEAR FOR SOUTH DAKOTA**

1948	T. F. Riggs, M.D., Pierre, S. Dak.
1949	Lyle Hare, M.D., Spearfish, S. Dak.
1950	Lyle, Hare, M.D., Spearfish, S. Dak.
1951	J. E. Bruner, M.D., Aberdeen, S. Dak.
1952	Rezin Reagan, M.D., Sioux Falls, S. Dak.
1953	R. J. Quinn, M.D., Burke, S. Dak.
1954	H. T. Kenney, M.D., Watertown, S. Dak.
1955	R. A. Buchanan, M.D., Huron, S. Dak.
1956	G. A. Landmann, M.D., Scotland, S. Dak.
1957	C. V. Auld, M.D., Plankinton, S. Dak.

GENERAL PRACTITIONER OF THE YEAR FOR SOUTH DAKOTA 1957



CLARENCE V. AULD, M.D.

Clarence V. Auld, eldest son of Oliver P. Auld and Nellie Hoon Auld was born in an upstairs room located on Main Street, Plankinton, South Dakota, April 14, 1886.

In 1892 he enrolled in the first grade in the City School. At nine years of age, he ran the town herd delivering the milk cows each evening and taking them to pasture in the morning. He worked as an errand boy in several stores and later became a painter.

He enrolled at Iowa State Normal School to begin his education. He decided he would like to try to be a doctor. Knowing and admiring a Dr. Coyle, who came to Plankinton, from the East and who was a graduate of the University of Michigan, he applied to the same university for admission. He graduated in June, 1909.

He received an appointment as interne in Minnequa Hospital, Pueblo, Colorado. His Hospital belonged to the Colorado Fuel and Iron Company and was one of the four or five model hospitals in the United States. No stairways, no elevators, no corners to catch dust — inclined planes were used instead of stairs. The operating room was lead lined and the entire room could be sterilized with live steam. It was later given to a Catholic Order who recently have built a multi-million dollar hospital over and incorporating the Old Minnequa Hospital.

In the late summer of 1910 he developed a severe cough which persisted and caused him to return to South Dakota. The cough turned out to be a second attack of whooping cough.

That fall he purchased the home and office equipment of Dr. George White, who was supposed to remain for six months, but who was taken sick and returned back East.

Although he had taken the Medical Board Examination and had been licensed in the State of Michigan, he was compelled to take the South Dakota examination. He was granted licensed No. 2181 on February 1, 1911.

Dr. Auld served as a member of the three man local board for the First World War, and also as Medical Examiner in which capacity he examined all the inductees of Aurora County. He enlisted in World War I and was very excited about being a Captain in the service, but he was not released from the local Board, and therefore was not able to serve his country as an officer.

He was Medical Examiner for the Second World War and examined about half the inductees, when the army medical men assumed the responsibility.

In 1912 he was united in marriage to Bird Abbott of Tyndall, South Dakota. To this union five children were born, two of whom unfortunately died. The other three of Dr. Merritt Auld and Dr. Marian Auld of the Medical Clinic of Yankton, South Dakota and Donald Auld of Plankinton.

For forty-eight years he has endeavored to serve the community to the best of his ability. Office hours have been from 12 to 12 around the clock. Vacations total about four months. For the past few years, he has been the only doctor in Aurora County.

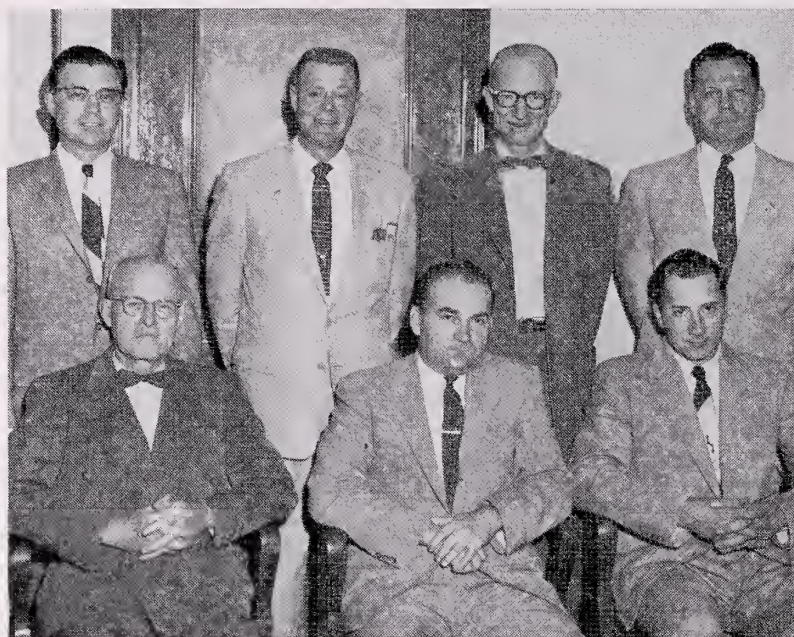
Dr. Auld is a fifty year Mason, played in the Shrine Band for several years, served one term on the School Board. He is a member of the Presbyterian Church and the Mitchell District Medical Society and the South Dakota State Medical Association.

CORRECT ANSWERS

1. (b) On leased property, you normally spread the cost of improvements over the shorter period — the life of the improvement or the term of the lease. Since your lease expires in four years and presumably the furnishings will have a longer life than that, you should be able to claim a \$250 deduction on your federal tax return for this year and the next three years.
2. (c) The money you received from the company must be reported as income, but you may deduct the cost of moving your entire family. If the amount the company gives you exceeds your expenses, the excess is taxable. Conversely, however, if your expenses were more than the amount received, the difference is not deductible.
3. (a) and (b) are both correct. All taxpayers are entitled to a \$50 dividend exemption. A husband and wife can combine their exemptions and receive \$100 in dividends tax free, providing the stock is jointly owned. The filing of a joint return will not qualify them for this double exemption if the stock is held in only one of their names.
4. (c) You cannot deduct contributions to an organization which spends a substantial part of its time lobbying or distributing political propaganda.
5. (a) You gained a son-in-law but lost a \$600 dependency exemption for 1957 when your daughter married in November. All is not lost, however. If you provided more than one-half of your daughter's support during the year, you may claim her medical expenses as a deduction on your return.
6. (c) Watching television can be most relaxing and it might even help you to forget your poker losses — which is the thing to do because net gambling losses are definitely not deductible. Net gambling gains are taxable as income; so if you won money in a football pool or other sources, you may use your poker losses to offset these gains.
7. (b) The IRS has ruled that "if the repairs do nothing more than restore the property to its condition immediately before the casualty and do not add to (its) value, utility or useful life, such repair costs may be used as a measure of the value of the destroyed portion." Where you were going at the time of the accident does not affect the deductibility of car damages.
8. (b) Commutation fees are not a deductible business expense. The cost of going to and returning from work, whether it be by bus, cab, train or plane, is not deductible since it is a personal expense. On the other hand, a and c are deductible.
9. (c) Damage to your shrubbery caused by children, dogs or errant lawnmowers is not deductible. If your home or lawn is damaged by fire, storm or flood the loss not covered by insurance may be deducted. When large amounts are involved it is wise to have an expert appraisal made immediately after the casualty.
10. (b) Since your son works for **you**, you are not supposed to pay social security tax on his wages, nor is he required to make contributions. If your business is incorporated, however, the corporation must pay social security tax on his salary.
11. (a) Your deduction for a charitable contribution is the value of the gift at the time it is made. You are not considered to have realized a taxable gain or deductible loss when you give property away. You may claim a deduction for the entire \$1,500 so long as this amount does not exceed 20 per cent (30 per cent in some cases) of your adjusted gross income.
12. (b) The roof is considered an improvement, not an ordinary repair. The cost of replacing the roof is deductible as depreciation spread over its estimated useful life.
13. (c) In the absence of fraud or substantial understatement of income, the Government has three years from the date of your 1957 return to check your return and bill you for additional tax.
14. (c) The fee which a CPA charges you to prepare a tax return or defend the accuracy of your return before the Treasury Department is deductible in full if you itemize deductions.



This is your MEDICAL ASSOCIATION



Public Health Advisory Committee Holds Organizational Meeting

The recently appointed Public Health Advisory Committee held the first of four annual meetings September 12 in Pierre. This six member Committee replaced the nine member Public Health Advisory Council as a result of action taken by the 1957 legislature.

Members of the Public Health Advisory Committee are left to right, Standing: J. P. Calvird, D. O., Custer; Stanley J. Costello, director of purchases, Presentation Sisters Hospital, Aberdeen; G. J. Van Heuvelen, M.D., M.P.H., state health officer and officio member; N. E. Wessman, M.D., vice-president, city health officer, Sioux Falls; Sitting B. G. Reid, D.C., Sisseton; A. A. Buechler, D.D.S., president, Gettysburg; and Myron Kromminga, D.V.M., Centerville.

FALL SEMINAR DRAWS FORTY

Forty out-of-state and several local physicians attended the State Medical Associations's first Fall Seminar held in Mitchell October 26-30. Enthusiastic acceptance of the Fall meeting was evidenced as doctors from thirteen states attended medical meetings mornings and evenings and hunted pheasants in the afternoon.

The program presented by Drs. Robert Good, Lyle French, Fletcher Miller, Robert Ulstrom, and William Krivit, all from the staff of the University of Minnesota School of Medicine.

FALL SEMINAR HIGHLIGHTS

Tired hunters aren't the best early-risers, so attendance, while excellent at evening sessions, suffered somewhat in the early A.M. sessions. We figure the physician who accosted Dr. Robert Good at noon with the comment, "Where in the dickens were you this morning?" and received the reply, "I was speaking on the program," is still smarting just a little.

One physician blew the end of the barrel out of his shot gun, miraculously avoiding damage to himself. Some doctor became the life of the party when he managed to get himself mired in a slough. He managed to have everyone, including himself, think he was having a heart attack.

* * *

Dr. Bill Follis, Bay City, Michigan, brought a Brit-tain Spaniel pup with him. The untird dog performed like a veteran.

* * *

Dr. H. M. Floersch, Kansas City, Kansas was oldest hunter present. An uncanny shot, he showed some of the 41 year-olds (just half his age) how to handle the fire stick.

* * *

Reports came back that **Dr. Mike Morrissey**, our State Association president, is a crack shot—a little color blind—but a crack shot.

* * *

While the hunters toted up their afternoon scores, Foster, the Executive Secretary, who doesn't hunt, managed to watch two football games on the idiot box and took a quick visit to Huron one afternoon.

* * *

Much credit for a successful meeting goes to the U of Minnesota for the program, the Corn Palace for housing, the Country Club, Masonic Temple and the Catholic Church. Two druggists helped with film projection.

* * *

University faculties are already vying with one another to put on next years program.

S.M.J.A.B. CONFERENCE HELD OCTOBER 28-29

The State Medical Journal Advertising Bureau held their conferences October 28-29 at the AMA in Chicago. **Dr. Mayer**, Editor of this Journal, **Phyllis Sundstrom**, Office Manager of the State Medical Association, and **Patricia Saunders**, Assistant editor, represented South Dakota at this conference.

Dr. Mayer, a member of the Board of Directors of the State Medical Journal Advertising Bureau, also attended their semiannual meeting held Oct. 27 in Chicago.

NEWS NOTES

J. F. Hill, M.D., Yankton, was elected to honorary membership in his district Society October 23rd.

* * *

Construction was begun this week, October 17th of a new office-clinic building for **Dr. D. E. Scheller**, at Arlington.

The Seventh District Medical Society met in Sioux Falls, November 5th to hear **Dr. Ray W. Gifford, Jr.** of the Mayo Clinic speak on "Methods and Indications for Anticoagulant Therapy."

* * *

J. C. Foster, executive secretary of the Association, met with the AMA's Advisory Committee on Public Relations in Chicago November 6 and also a Medical T.V. conference on the 7th and 8th.

Doctors Theodore and Ruth Czajkowskyi formerly of Winnipeg, Canada arrived at Veblen Saturday October 5th to begin their medical practice. Plans are now being made for a suitable location for the new medical offices. The opening date will be announced later.

* * *

Dr. Paul Bunker, Aberdeen, presented an illustrated lecture on Bronchoscopy to the S.A.M.A. chapter at Vermillion on Wednesday, October 9.

* * *

A regional meeting of the American Society of Bacteriologists was held at the University of South Dakota October 18-19. **Dr. C. D. Cox**, Professor of Bacteriology, served as President of this group and officiated at the business meeting.

* * *

Drs. J. G. Forthner and **R. D. Brasfield** of the Memorial Institute for Cancer Research, New York City, presented illustrated lectures on oncology to the S.A.M.A. chapter at the University on Wednesday, October 23. These gentlemen also presented an illustrated lecture on hepatic surgery to the Yankton District Medical Society meeting held at the Medical school the evening October 23.

* * *

A pre-registration of 20 candidates has accrued for the blood bank work-shop to be held at the Medical school November 14-16.

COMMITTEE STUDIES LIABILITY COVERAGE

The Committee on Medical Defense is currently studying the possibilities of establishing a group program of physicians liability insurance.

Continually rising costs of individual coverage prompted a survey of physicians which was reported in a recent issue of the Journal.

Proposals are now being studied that may well reduce premium rates as much as 30%.

Action on the proposals will be taken by the Council in January or by the House of Delegates in May.

HOSPITAL ASS'N HOLDS FALL MEET

Delegates to the South Dakota Hospital Association convention in Sioux Falls on October 15 and 16 elected Horace Atkin, administrator of the Redfield Community Memorial Hospital, president. He succeeds E. B. Morrison, Sioux Falls.

Named president-elect to replace Atkin was Sister M. Rosaria, Yankton. Other new officers include:

Stanley Costello, Aberdeen, vice-president; Zella Messner, Pierre, secretary-treasurer, and Sister M. Stephen, Mitchell, trustee.

Morrison was elected American Hospital Association delegate with Mother Cornelia, Aberdeen, as alternate.

Registration for the two-day convention reached 175. Dr. Carl Wilson, associate professor of speech at South Dakota State College, was speaker and consultant for the conference.

Meeting in conjunction with the South Dakota Hospital Association were the South Dakota Association for Hospital Auxiliaries and the South Dakota Association for Medical Record Librarians.

ABERDEEN DISTRICT HUNTS AND SHOOTS

The Aberdeen District Medical Society held its Second Annual Pheasant Hunt and Scientific Meeting November 1-3. The regular monthly district meeting was held Friday evening November 1 at the Mexican Room of the Sherman Hotel. Following the dinner and business meeting Dr. Lee M. Eaton head of the Neurological Department of the Mayo Clinic, gave a talk on "The Diagnosis and Treatment of Epilepsy, Dr. James T. Priestly chairman of the Board of Governors of Mayo Clinic, gave a very excellent paper on "Surgical Lesions Pancreas. Saturday afternoon was spent Pheasant hunting.

Sunday morning a breakfast held at 9 o'clock at the Sherman Hotel and at that time Dr. Corrin H. Hodgson and Dr. Herbert W. Schmidt presented 4 cases of chest diseases, which had been major problems at Mayo Clinic. There was a lively discussion and the district members present enjoyed it very much. Following the meeting members and guests again went hunting.

Dr. Paul Bunker arranged the Scientific program and should be commended for the excellent meeting. Hunting arrangements were made by Dr. M. R. Gelber. The hunting was very successful.

BROOKINGS DOCTORS HURT IN CRASH

Drs. Magni Davidson and Myron Tank, Brookings were injured in a two car crash, one and one-half miles south of Brookings early Sunday morning November 3rd. They were returning from the State-Morningside game at Sioux City.


Dr. Davidson, chairman of the Medical Associations Council, sustained a fractured sternum. Dr. Tank, who was driving, received a fractured vertebra. The driver of the other car was charged with reckless driving.

The twenty-first annual meeting of The New Orleans Graduate Medical Assembly will be held March 3-6, 1958, at the Roosevelt Hotel.

A tour to Mexico follows the New Orleans meeting.

DETAIL MEN DISCUSS WITH MED. ASSISTANTS

The Sioux Falls Chapter of the American Association of Medical Assistants held their regular monthly meeting in the Chamber of Commerce Rooms, Monday the 4th of November. A group of the leading pharmaceutical detail men presented their ideas on how the office girl should handle the matter as far as their getting to see, or not getting to see the doctor. It was very informative for both the assistants, and the detail men. The following men participated in the discussions: Don Beardsley, Warren Kemp, Bill Couch, Bob Trumm and Geo. Gibson.



PHARMACEUTICAL

SECTION

HAROLD S. BAILEY, PH.D.

EDITOR

Division of Pharmacy
South Dakota State College
Brookings, South Dakota

PHARMACEUTICAL *Paper*

ACCIDENTS IN THE UNITED STATES† by Health Information Foundation New York, New York

Last year 95,000 Americans died prematurely because of injuries sustained in accidents. The annual number of accidental deaths averaged about 75,000 early in this century, but just before 1930 the yearly average rose to about 100,000 and has remained at that level.

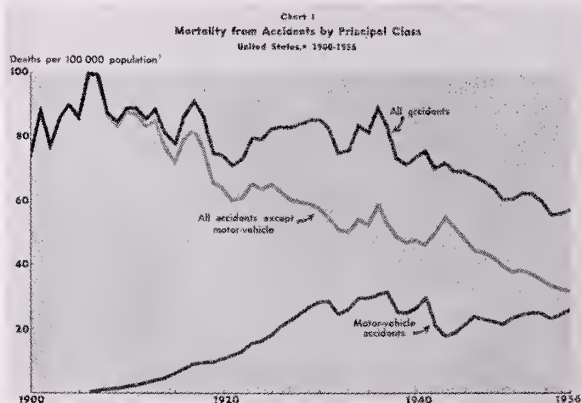
The stability of the over-all accident death toll masks a considerable improvement in many aspects of the accident problem. Death rates per 100,000 population have declined by over 40 per cent, from 99.5, the peak in 1906, to 56.5 in 1956 (see Chart I). For all accidents except motor-vehicle, the decline has been

even sharper — more than two-thirds of the peak figure. The 1956 rate was 30.8 per 100,000.*

In recent years accidents have consistently ranked fourth among the leading causes of death. They have been outranked only by such major illness as heart disease, cancer, and cerebro-vascular lesions (mainly cerebral hemorrhage). The rise of accidents among the leading causes of death in this century has resulted from the declines in mortality from the major communicable diseases — not from any increase in accident mortality itself.

In 1956 accidents caused 6 per cent of all deaths in the United States, and at ages 1 to 36 they were the leading causes of death. Rates were highest at the upper ages, but accidents were heavily outranked as a cause of death at these ages by heart and other diseases associated with aging. Accidental death rates were nearly 2½ times higher among males than females, and higher among nonwhites than whites.

The cost of accidents are not felt merely in the loss of human lives. In 1956, according to the National Safety Council, accidental injuries numbered over 9½ million, including 350,000 resulting in some degree of permanent impairment.* In dollars, total accident costs



*Death-registration states only, 1900-1932. In 1900 these consisted of 10 states and the District of Columbia.

†Adjusted to 1940 standard. Rates for 1954-56 calculated by Research Department, Health Information Foundation. Source: Various reports by the National Office of Vital Statistics.

‡Reprinted from "Progress in Health Services" Vol. VI, No. 8, October 1957, a publication of Health Information Foundation.

*Rates compared over time are adjusted for comparability to a 1940 standard, and thus may not agree with the actual mortality rates in 1956.

(including property damage, wage losses because of inability to work, etc.) were estimated at about \$11.2 billion — almost as much as Americans spend for all private medical services.

Accidents occur in four kinds of environments — on the job, in public places, at home, and in motor vehicles. In the last 30 years, accidents on the job and in public places have decreased substantially, but those involving motor vehicles have increased as the volume of motor traffic has expanded.

On-the-job accidents

One of the brightest elements in the entire situation has been the success achieved against fatal accidents on the job ("work" accidents). In spite of a greatly expanded labor force, the death toll of workers on the job has been reduced from 19,000 in 1928 — the first year these data became available — to 14,300, as estimated by the National Safety Council for 1956. Death rates in 1956, 23 per 100,000 workers, established a record minimum at just over half the peak rate of 43 in 1937.

The most hazardous industries in 1956 were mines and other extractive industries, where the mortality rate reached 100 per 100,000 workers (see Chart II). The construction industry followed with a rate nearly three-

fourths as high, 71 deaths per 100,000 workers. The safest industries were trade, manufacturing, public utilities, and services with mortality below the national average.

Much of the success against work accidents has been due to intensive safety campaigns, resulting in increased safety consciousness among both employers and employees, and to improvements in conditions at work and in levels of living and of medical care. Protective devices have been adopted against the major accident and health hazards in industry, including high temperature, silica dust, radiation, and toxic chemicals. Shorter working hours have helped to cut industrial fatigue, so often a factor in accidents. In many industrial processes the replacement of noxious substances by harmless ones, and the substitution of automatic machinery with proper safety devices for hazardous manual techniques, have helped considerably to reduce the accident toll.

Recreation, public transportation

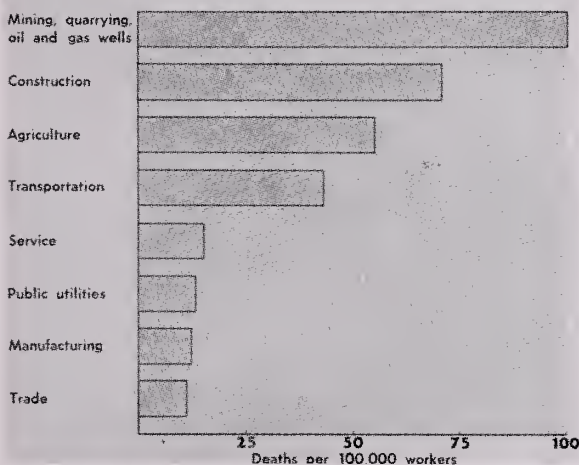
Also encouraging is the substantial reduction in mortality from public accidents, i.e., non-motor-vehicle accidents occurring in public places. Moreover, this reduction has taken place in spite of the increased amount of leisure time enjoyed by the American people in recent years, with much of it devoted to sports and other recreational activities in public places. Deaths from these accidents numbered about 21,000 in 1928 but dropped to 16,000 by 1956.

About a fourth of these deaths — 4,000 in 1956 — were due to the drowning of persons while swimming or playing in water or falling into water. If drownings in transportation or boat accidents are included, the total exceeds 5,000. Falls and firearms combined accounted for an additional fourth of the public-accident death toll in 1956.

Almost an additional fourth — 3,650 in 1956 — involved some form of transportation, primarily air, water, and railroad. The largest toll — 1,300 in 1956 — came from aircraft accidents, both military and civilian. In view of the huge increase over the last few years in the volume of air traffic, this figure, although high, is still a considerable improvement over former years.

The largest number of fatal aviation accidents usually occurs in private flying, chiefly

Chart II
Mortality in Work Accidents by Industry Group
United States, 1956



Source: Estimates by National Safety Council, Accident-Facts, 1957 edition.

*National Safety Council, "Accident Facts — 1957 Edition," and various prior issues. Many of the data in this bulletin are derived from this source.

for pleasure and other noncommercial purposes. Domestic scheduled airlines have a superior record. In no year since the 1933-37 period has the death toll on scheduled airlines exceeded 200, and in only four years — 1947, 1951, 1955, and 1956 — has it exceeded even 100. Over the last 20 years the average annual death rate per 100 million passenger miles on these carriers was cut by over 90 per cent, from 7.80 in 1933-37 to 0.62 in 1956.

Just as heartening a story can be told about progress in railroad safety. Of the major forms of transportation, railroad passenger trains currently provide one the the safest means of passage, 0.20 deaths per 100 million passenger-miles. Deaths in all types of railway accidents (not merely those directly involving the transportation of passengers) have declined sharply, from about 10,000 in 1918 to 2,600 in 1956. Since 1918, deaths of passengers have declined by more than 85 per cent, from over 500 in 1918 to 62 in 1956.

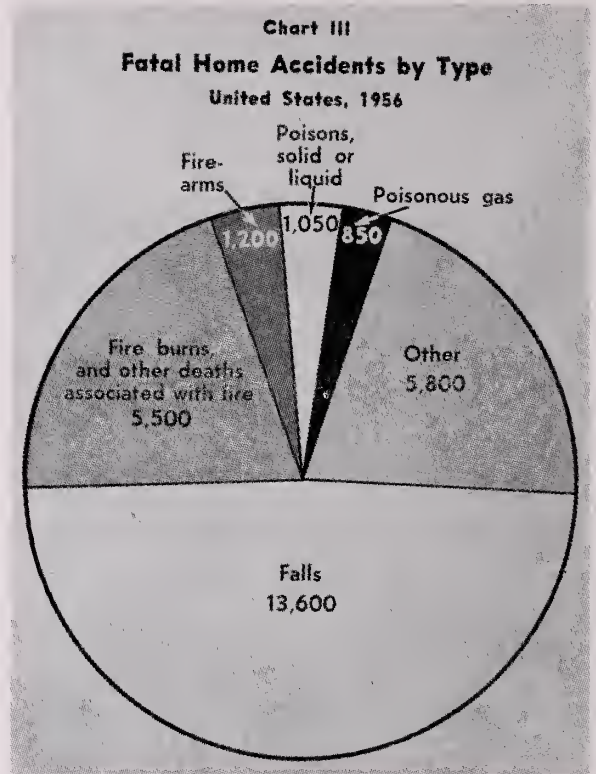
Accidents in the home

In the home the record has been less promising. With minor fluctuations, the number of deaths from home accidents has averaged around 30,000 each year since 1928; in 1956 the total was 28,000. Thus the American home was involved in nearly 30 per cent of all accidental deaths in 1956.

About half — 13,600 in 1956 — resulted from falls (see Chart III), primarily to persons aged 65 and over. Older people are especially vulnerable because of the greater amount of time they spend in the home and their frequently impaired physical condition.

Fatal burns from fires, and other deaths associated with fire, took over 5,000 lives in the home during 1956. Fire accidents are an important cause of death at all ages and are the leading cause of accidental death in the home at ages 1 through 64. Aged persons and children under five have the highest mortality rates and constitute half the victims in this type of accident.

A large proportion of the victims are trapped in homes destroyed by the fire. Important among causes of death by burns in the home are careless smoking, accidental igniting of clothing on a stove or open fireplace, and explosion of cooking or heating appliances. In the past few years deaths have declined considerably as a result of general modernization of homes and widespread use



Source: Same as Chart II.

of improved facilities for cooking, heating, lighting, and laundering.

About 850 deaths in the home were reported in 1956 as due to poisonous gas. Poisonings by solid or liquid substances accounted for an additional 1,050 deaths.

Motor-vehicle accidents

Accidents involving motor vehicles took over 40,000 lives in 1956, the largest number ever recorded. Deaths rose steadily early in the century from a low start at 400, the annual average for 1903-07, and by 1937 and 1941 peaks of just under 40,000 deaths were reached (see Chart IV). Temporary declines during World War II were reversed by a sharp rise afterward. Except for a minor dip during 1954, the course of the death toll since 1950 has been steadily upward.

The rising number of deaths alone, however, tells only part of the story. Since 1900 the U. S. population has more than doubled, and so the death rate per 100,00 persons is a better measure of risk. This rate, like the number of deaths, reached peaks in 1931, 1937, and 1941 (28.3, 31.2, and 29.8, respectively). After declines during World War II, the rate climbed slowly, reaching 25.7 in 1956 — still under the former high levels.

The recent increases in the population death rate are not surprising, in view of the growing importance of motor vehicles in American life. While just over 4,000 motor vehicles were produced in this country during 1900, over 9 million were turned out in 1955 alone.* In 1956, 64.5 million motor vehicles were registered, while about 77 million drivers were licensed. Moreover, mileage traveled has increased at an almost phenomenal rate. Preliminary estimates indicate that motor vehicles traveled 630 billion miles in 1956, an average of just under 10,000 miles per vehicle.

As a result, a more realistic measure of motor-vehicle risk is the death rate per 100 million vehicle miles. This rate declined consistently, from a peak of 16.7 in 1934, to a record low of 6.3 in 1954. There was a slight rise to 6.4 in 1955 and 1956. This index suggests that safety in motor-vehicle travel has actually increased substantially since early in the century.

The greatest achievement has been the reduction in pedestrian deaths since 1937. From 1927 to 1937 these deaths rose from just under 11,000 to 15,500 but decreased thereafter, especially during the war. By 1956 the number stood at just under 8,000. Pedestrian death rates are lowest at ages 15-44, somewhat higher at ages under 15, and highest at 45 and over. In this last age group, nearly 5,000 such deaths occurred in 1956 — three-fifths of the total.

Noncollision accidents

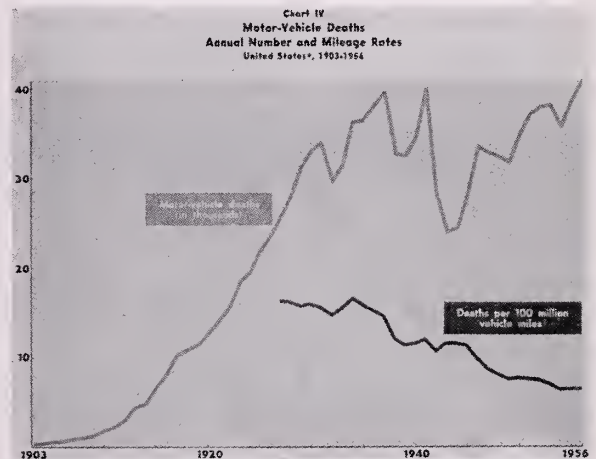
A rising trend of deaths in noncollision accidents has largely offset the decrease in the number of pedestrian fatalities. The annual death toll in noncollision accidents averaged just under 9,000 from 1927 thru 1941, dropped to about 6,000 during the war years, and since then has risen steadily and rapidly, reaching 14,650 in 1956.

Rising even more sharply has been the toll from collisions between motor vehicles. Deaths in 1956 — 13,850 — were four times as numerous as those in 1927. Here, as with fatal noncollision accidents, persons in the age group 15-24 were the chief victims, and

an overwhelming proportion of the accidents occurred in rural areas.

Death rates from all types of motor-vehicle accidents are higher in rural than in urban areas. On the basis of motor-vehicle traffic deaths per 100 million vehicle miles in 1956, three predominantly rural states — Arizona, Alabama, and New Mexico — led the country with rates of 10.1, 9.2, and 9.1, respectively. When traffic deaths per 100,000 population are considered, Nevada, Wyoming, and New Mexico registered the highest rates, 56, 54, and 49, respectively. The New England and Middle Atlantic states, more heavily urbanized, uniformly had the lowest rates by either measure. Among the states, Rhode Island pointed the way with lowest rates of 2.3 and 8.2, respectively.

A recent investigation into one aspect of the motor-vehicle accident problem, violations by drivers in fatal accidents, showed that nearly one-third were exceeding the



*Death for 1903-32 are estimated for the entire United States from data of the National Office of Vital Statistics for the death-registration states.

†Data prior to 1927 inadequate for the computation of rates. Source: National Safety Council, Accident Facts, various issues.

speed limit, or a safe speed, at the time of the accident. In urban areas, violating right-of-way was the next most common condition, while in rural areas failure to keep to the right of the center line followed in importance. In 22 out of 100 fatal accidents, a driver or an adult pedestrian had been drinking; "driving while under the influence of alcohol" was a factor in 7 per cent of all fatal accidents.

The weather was rainy, snowy, or foggy in one out of six fatal accidents, and in nearly as

*Automobile Manufacturers Association, "Automobile Facts and Figures," Thirty-Sixth Edition, 1956, Detroit, Michigan.

many cases there was some obstruction to the driver's vision. In nearly one out of 12 fatal accidents an unsafe condition was reported in at least one of the vehicles involved, most often unsafe brakes. About one out of 14 drivers had a physical condition — most often they were asleep — that could have been a contributing factor in the accident. About the same proportion of pedestrians in fatal accidents had physical defects.

Over one-fourth of the drivers in fatal accidents were between 18 and 24, and nine out of ten were men. But no valid conclusions can be drawn from these data about the comparative safety records of the different sex and age groups, since the total mileage driven by each is unknown.

In an attempt to reduce the motor-vehicle death toll, automobile manufacturers have begun to build protective mechanisms into their products, such as safety belts, doors that remain closed under impact, flexible steering wheels, dashboards without protrusions and covered with shock-absorbing material, and similar devices. In addition, an important step was taken by the directors of the

Automobile Manufacturers Association last June when they unanimously agreed to de-emphasize speed and horsepower in the industry's advertising. For such preliminary measures to be intensified, however, the public must be educated to accept and even to demand at least these minimum protections.

In general, safety against accidents has achieved the greatest success where society has been able to bring its organized influence to bear. Safety regulation are stringently enforced in industry, railroads, scheduled air transport, public beaches, and similar environments, with gratifying results.

On the other hand, where the individual himself must assume most of the responsibility for his own safety and in many instances for that of others (in such places as the home and motor vehicle) safety progress has been slower. Although accidents are often beyond human control, a large element of carelessness and irresponsibility is involved in others. Perhaps the only real solution to the accident problem lies in intensified educational activities designed to spread safety consciousness among all parts of the population.

Druggists' Mutual INSURANCE COMPANY OF IOWA

▲
AVOID A
SERIOUS
FIRE LOSS
▲

With genuine appreciation of our pleasant associations during the past year, we extend to you our best wishes for an Old Fashioned

Merry Christmas

and a

New Year

of Happiness, Security and Prosperity



HOME OFFICES
ALGONA, IOWA

All Policies Non-Assessable

PHARMACEUTICAL *Paper*



PHARMACY'S RESPONSIBILITY FOR SELF GOVERNMENT*

by

W. E. Powers**

New York, New York

Thank you very much for inviting me a second time to address your convention. This area is one of my favorite spots as I have visited here on three previous occasions to enjoy your beautiful scenery. Being a native of Colorado I miss the mountains and always look forward to these trips.

I know Bliss Wilson and I think somewhat along the same lines and I am hoping that my message today will not sound like the same old stuff. However, some of it bears repeating, even though I believe you pharmacists here in South Dakota are quite aware of your responsibilities both to the profession and the public you serve.

Before beginning my topic, I would like to tell you just a bit about the National Pharmaceutical Council, with which I am associated. Twenty-one pharmaceutical manufacturers comprise our membership. Our target is immediate and professional — the pharmacist who dispenses, whether he be retail or hospital, and the physician who prescribes. These are the customers of our members and the objectives of the N.P.C. engage the interest and support of but one element of the health team, the manufacturer. We occupy ourselves principally with one problem — what is frequently called "substitu-

tion' but can be positively expressed as brand identification and I am happy to state that you were among the first states to give attention to the matter.

Your board some time ago promulgated a regulation designated Section M prohibiting brand substitution. You are to be complimented upon your foresight in taking a definite position before any problem developed in this state. This is further proof that you are conscientiously discharging your duties as a self-governing profession.

Coming back a moment to the Council, all of you no doubt received or have seen our latest booklet, "24 Reasons Why Rx Brand Names Are Important to You," which was distributed in February throughout the country. In the text we have spelled out the reasons which make substitution medically dangerous. The arguments are explicit, scientific and exhaustive and I hope you have had an opportunity to read the booklet thoroughly.

You also no doubt remember our original two booklets, "I Hate to Buy Drugs, But —" and "Why All the Mystery in Prescriptions?", which were intended to start the ball rolling for your pharmacists in bettering public relations. About a million copies of each were distributed and we are still receiving requests for them, although our supply is nearly exhausted.

*Presented to the South Dakota State Pharmaceutical Association Convention, June 22, 1957.

**Secretary, National Pharmaceutical Council.

However, our Council is now limiting its public relation activities as this effort is now being spearheaded by the Health News Institute, which was formed early in 1956. This organization is principally financed by the manufacturers through the American Drug Manufacturers Association and the American Pharmaceutical Manufacturers Association, although many other organizations in pharmacy contribute, including the A.Ph.A. and N.A.R.D.

In the foreword of the first annual report recently released, George F. Smith of Johnson & Johnson, Chairman of HNI's Board of Trustees, comments particularly upon the highly important work done so far by HNI to minimize unwarranted public criticisms leveled at the industry and points out that by presenting facts to editors, feature writers, reporters and others, it is frequently possible to avoid harmful publicity. You will be hearing more of this group as they develop their public relations program.

To begin my topic, I would like to remind you that we pharmacists enjoy a really exclusive professional calling. If numbers alone were a criterion, we should enjoy much more professional respect from the public and our fellow practitioners on the health team as there are only about one hundred thousand pharmacists in this entire country practicing in 53 or 54,000 pharmacies. Even adding on those of us who are in association work, education, manufacturing, detailing, etc., we still constitute only a minute portion of the working force of this nation.

I also wish to remind you of the privilege which has been granted to us to govern ourselves and to emphasize as Bliss Wilson has been doing that this must be exercised in the interests of public health and safety. *It is, of course, a privilege that the public through the legislature can take away if there are abuses.

Responsibility for Self Government

In South Dakota as in every other state, you have a board of pharmacy to enforce certain laws and regulations. While many expect miracles of board members and hold them responsible for setting the level of pharmaceutical practice in the state, I feel the real responsibility should be placed upon you, the practicing pharmacist. I think the level achieved is what pharmacists practicing

in any particular state care to make it and that they often influence and even dictate the extent of a board's activities. If pharmacists through their associations set a high level of standards and cooperate with the board, high standards result irrespective of possible weaknesses in the pharmacy law. Of course, there must be men of high character on the board, but again this is your charge as in your state recommendations for appointments to the board of pharmacy are made by you through your state association. You have a unique situation existing here in South Dakota as every registered Pharmacist by law belongs to your association and your pharmacy act states the purpose of the association shall be to improve the science and art of pharmacy and restrict the sale of medicine to regularly educated and qualified persons. It is most democratic as every pharmacist through the association can take part in the choosing of the candidates to be recommended for appointment to your board of pharmacy. I am certain you realize this trust which has been placed in you.

In order to develop further this theme of responsibility for self-government, it may be helpful to review briefly some of the problems being considered elsewhere. This may give you some ideas of what may be desirable to consider in your state, although I hasten to point out that legislation is not always the best or only answer.

Ownership of pharmacies is a perennial question about which much is spoken but little is done. Many years ago the Pennsylvania State Board of Pharmacy refused to issue permits to operate pharmacies except to registered pharmacists and eventually was overruled by the United States Supreme Court, which declared this procedure to be unconstitutional. I understand the same thing happened some years ago in New York.

During the early forties, the New Jersey Board restricted ownership of pharmacies under a statement of policy, but in 1945 the State Attorney General found it to be legally untenable. The Minnesota Board also passed a similar regulation which has recently been under court attack. Such a requirement was written into the Illinois Pharmacy Laws for many years, but was dropped in the 1956 revision. However, I understand new legislation restricting ownership is now being explored.

The question comes up most frequently today when a group of physicians apply for a permit to operate a clinic pharmacy. Not too long ago the North Dakota Board of Pharmacy refused a permit for the operation of a clinic pharmacy under a regulation requiring at least two of the officers of the corporation seeking the permit must be registered pharmacists and a minimum of 400 square feet of space must be occupied by the pharmacy, which must be walled off from the remainder of the building and have a direct street entrance. The Supreme Court of North Dakota last December ruled against the Board.

I have been suggesting that the possibility be explored of issuing a permit to the registered pharmacist in charge or jointly to the pharmacist in charge and the owner in the thought this would not interfere with the ownership. However, the permit would automatically expire if the registered pharmacist in charge should be discharged or sever his employment.

In looking at your Pharmacy Act I discover it specifically provides for the issuance of pharmacy permits only to pharmacists in good standing but, if my interpretation is correct, does not limit ownership as a non-pharmacist may own the merchandise and fixtures. Your law further provides the permit shall be conspicuously displayed along with a certificate naming the pharmacist actually conducting the pharmacy.

It appears to me you have the answer to the problem right here in your law and in the future I can refer directly to it when the subject arises in other states. I wonder though whether you have been fully cognizant of this forward looking legislation you enjoy here in South Dakota which I do not believe is duplicated elsewhere.

Definition of Pharmacy

What could be key legislation — a satisfactory definition for “pharmacy” and “drug store” — is being talked about in many areas, but I do not know of any state in which a bill has yet been introduced. I would like to limit my discussion to the designation of “pharmacy” because I would like to see it stressed, even though it undoubtedly would be necessary in any legislation to define both “pharmacy” and “drug store” synonymously.

You all are aware that when there is occasion to picture the establishment in which you

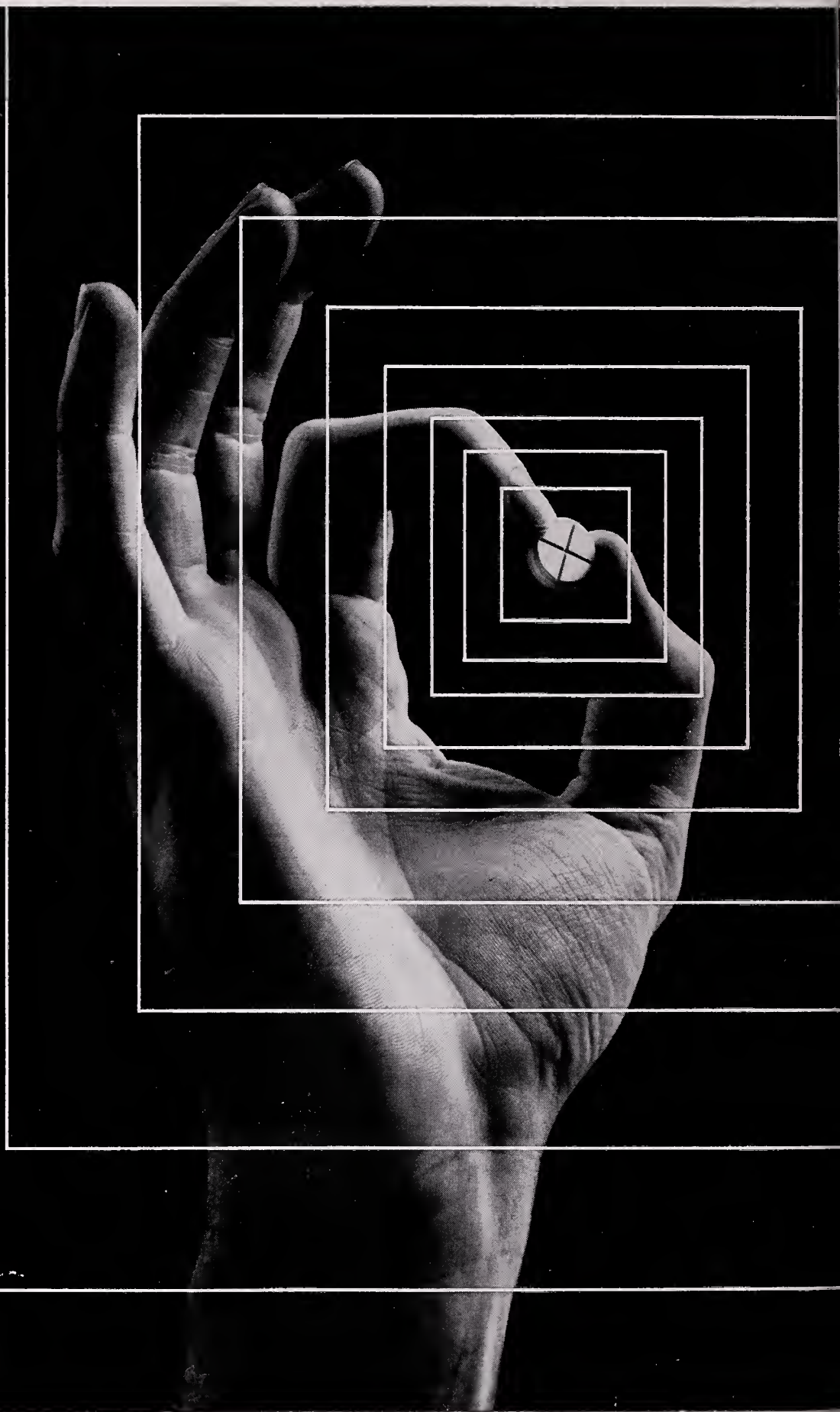
practice pharmacy, the layman, frequently including lawyers and judges, often point out as typical one of our merchandising type stores in which very few prescriptions may be compounded. Surely there must be a point at which an establishment becomes a department or general store with a drug and prescription section and is no longer a pharmacy. I think it is detrimental and a reflection upon our profession to permit some of these stores to be designated as a pharmacy or drug store.

While you should continue to attempt to restrict usage of both terms, as I have already indicated, you must remember the term “drug store” even now is not an exclusive one. In at least two states I know of, Montana and Texas, it may be used by any merchant. For that reason alone I would recommend that every association promote the use of the designation of “pharmacy.” I doubt whether this can be taken away from us and what is more proper and professional than 100,000 pharmacists practicing in more than 50 thousand pharmacies. What a public relations impact this would create and you can do it without any legislation!

Coming back to the definition, the best one developed so far in the opinion of many would require that a certain minimum percentage of floor space be devoted to the drug and prescription departments in order to designate the entire establishment as being a pharmacy or drug store. Otherwise some other terminology would have to be used and it could only be advertised that the store included a drug and prescription department.

One of the most important professional objectives today is the subject of codes of ethics. Many state associations are considering adopting new ones or revising those previously drawn and I was very interested in listening yesterday to the proposal you are now considering. In the past those which have been adopted in other states have not been enforceable to any great degree because the most drastic action an association can take is to drop an offender from membership. Unfortunately, this often does not deter such a pharmacist from continuing his unethical practices.

Last year a bill was passed in Louisiana granting the board of pharmacy specific authority to develop and enforce a code of ethics and the Board early in the year pub-



*a new era
in sulfa therapy*

ONLY ONE TABLET A DAY

KYNEX *

SULFAMETHOXYPYRIDAZINE (3-SULFANILAMIDO-6-METHOXYPYRIDAZINE) LEDERLE

New authoritative studies prove that KYNEX dosage can be reduced even further than that recommended earlier.¹ Now, clinical evidence has established that a single (0.5 Gm.) tablet maintains therapeutic blood levels extending beyond 24 hours. Still more proof that KYNEX stands alone in sulfa performance—

- Lowest Oral Dose In Sulfa History—0.5 Gm. (1 tablet) daily in the usual patient for maintenance of therapeutic blood levels
- Higher Solubility—effective blood concentrations within an hour or two
- Effective Antibacterial Range—exceptional effectiveness in urinary tract infections
- Convenience—the low dose of 0.5 Gm. (1 tablet) per day offers optimum convenience and acceptance to patients

NEW DOSAGE. The recommended adult dose is 1 Gm. (2 tablets or 4 teaspoonfuls of syrup) the first day, followed by 0.5 Gm. (1 tablet or 2 teaspoonfuls of syrup) every day thereafter, or 1 Gm. every other day for mild to moderate infections. In severe infections where prompt, high blood levels are indicated the initial dose should be 2 Gm. followed by 0.5 Gm. every 24 hours. Dosage in children, according to weight; i.e., a 40 lb. child should receive $\frac{1}{4}$ of the adult dosage. It is recommended that these dosages not be exceeded.

TABLETS: Each tablet contains 0.5 Gm. ($7\frac{1}{2}$ grains) of sulfamethoxypyridazine. Bottles of 24 and 100 tablets.

SYRUP: Each teaspoonful (5 cc.) of caramel-flavored syrup contains 250 mg. of sulfamethoxypyridazine. Bottle of 4 fl. oz.

1. Nichols, R. L. and Finland, M.: *J. Clin. Med.* 49:410, 1957.

lished one which was developed after many months of study. This may be the only feasible approach but I would like to see the enforcement of code of ethics in the hands of state associations.

Another feature of the Louisiana amendment was to direct the Board to confer the honorary title of "Ethical Pharmacist" on each qualified licensed pharmacist in good standing who meets all of the qualifications and requirements fixed by law of which the law authorizes the board to establish. Such certificates have recently been issued by the Board.

The Louisiana law also declares the practice of pharmacy to be a profession and the same type of definition has recently been passed in at least two other states. There are many individuals, however, who are not certain this is the best approach. In his presidential address recently to the APhA, John MacCartney commented on this subject as follows:

"No one can seriously doubt the high purpose of the advocates of such legislation nor can anyone deny the desirability of such legal declaration. It would appear, however, that Pharmacy, which has had a professional heritage of thousands of years and has had a stated code of professional and ethical conduct for much of that time, might well be exposing itself to criticism if we are too insistent on legal definition of our professional caliber — unless the request for such legislative authentication is preceded in each such instance by complete assurance that all of the practitioners of our profession fully qualify for the legal status we now request."

I thought you might be interested in this discussion if such a proposal is presented to you for consideration and I think you are proceeding in the right direction in your consideration of a code of ethics.

For the past few years a great deal of attention has been given to improving our public relations. Since "P.R.," as it is usually termed, can mean so many things, I would like first to give a definition I have borrowed from the American Chemical Society and changed by replacing the word "chemical" with "pharmaceutical." It reads "Public Relations for the pharmaceutical profession

comprises all the activities of the profession and its members which are concerned with building public understanding of the profession and good will toward it."

I think that most of us will agree public relations for the community pharmacist begin in the pharmacy in which he is practicing his profession and no amount of favorable publicity will achieve very much if the public is not properly impressed by the pharmacist and pharmacy he patronizes.

Associations can do much but there are many who believe that finally only a board can eliminate the substandard pharmacies and the unprofessional pharmacists. Pharmacy is principally practiced as a profession in the prescription department, which is often termed the heart of the pharmacy. During recent years it has been found that a prescription department can be featured, even in a super drug store merchandising operation, to the extent that there is a professional atmosphere and the public tends to think of it as the pharmacy. This leads to the thought that our public relations can be immeasurably improved if we can eliminate substandard prescription departments.

Although at least two boards of pharmacy followed this reasoning to conclusion some years ago by promulgating regulations setting up minimum dimensional requirements for prescription departments, there was not too much general interest until this grass roots public relations program, to which I have referred, became a principal topic of discussion. Now during the past six months there have been at least three boards, in Louisiana, New York and Wisconsin, promulgating regulations setting up minimum standards for the area of the prescription department, aisle space, counter space, facilities etc. It may be a trend and it may be of interest to you in your deliberations.

Practical Experience Requirement

The practical experience requirement for registration as a pharmacist is being given a great deal of consideration because of the five-year course which becomes mandatory beginning in 1960. At present almost all pharmacy acts require one year of experience but the time when it can be obtained varies considerably. In some states it may be obtained beginning with the 15th or 16th birthday and in other states no credit is given for

any experience obtained prior to entering the college of pharmacy. Some states require three months of the experience to be secured after graduation, others six months and in two states, the entire year must be worked after graduation. There appears to be a trend to requiring some experience after graduation and that it should be more closely supervised by the board of pharmacy to make certain the interne is receiving the practical instruction intended. Although I note credit is given here for experience obtained after the sixteenth birthday, your experience regulations are right up to the minute and the program is closely supervised by the board.

Recently there has been some talk in at least one state that the college of pharmacy should assume the responsibility for this program. There even has been some discussion of increasing the college course to six years with the internship being worked into the last year. I have been told this is done in some engineering schools where the student works six months in the field in some company and attends classes the remaining six months. I understand it is also being done in the ministry with at least one theological seminary working in one year of internship associated in an overall church program after two years of education and ending with another year of schooling.

In any event, I think most everyone agrees practical experience is still important but that the method of obtaining it should be improved in some states. If you have not been thinking about it, you should, as this responsibility of supervising the practical training of embryo pharmacists has always been delegated to practicing pharmacists. I am certain Bliss Wilson can tell you just what is being done in other states and bring you up to date on the current thinking about practical experience, if you are interested.

I hope you do not interpret any of these comments as being critical of your activities here in South Dakota. I think you have been doing an outstanding job. However, none of us can excel in everything and sometimes an individual from outside of the state can point out various problems in other areas as I have attempted, which will give you material for discussion and food for thought. I should point out, however, that what is good for one state is not necessarily good for another and

you best know your own needs.

In closing may I list a number of suggestions, which I feel are part of your overall responsibilities to the profession and the public. If you use this as a guide list, you not only will be properly discharging your responsibilities but will definitely improve your public relations.

1. If you have a small, dingy prescription department, enlarge it, paint it, improve it so you can be proud to invite your customers, or patrons as I prefer to call them, and their physicians in to see it.

2. Light up, clean up and improve the appearance of your entire pharmacy.

3. Provide for the comfort of customers waiting for prescriptions.

4. Take down the "cut-rate" signs and the other signs which reflect upon you and your neighbor's practice of pharmacy.

5. Always refer to and treat your neighboring pharmacists as colleagues.

6. Discontinue the unethical practice of supplying to physicians imprinted prescription blanks.

7. Proudly display your certificate of registration, your pharmacy permit and your diploma. Even better, feature them on a panel with an appropriate heading.

8. Designate your establishment as a "pharmacy" as I have already discussed.

9. Why not popularize the use of the designation "R.P." for "registered pharmacist." It has taken hold wonderfully in Nebraska and New Jersey. What do you think of this sign the Nebraska Pharmaceutical Association is distributing to its member pharmacies? This is real public relations on a "grass roots" level and it so impressed me I had one made up to show where I speak.

10. Install a professional window regularly.

11. Store biologicals, vitamins and other drugs requiring cold storage in a refrigerator in view of the public so that they can see the care you take to supply fresh drugs without advertising the fact. It should be self-evident and, of course, you should check these drugs regularly to remove any which may become outdated.

12. Display sick room and surgical needs near the prescription department. It helps to

(Continued on Page 507)

PRESIDENT'S PAGE

Rx



Fellow Pharmacists:

Many thanks to all the pharmacists who attended the N.A.R.D. Convention in Minneapolis last month. We had a very nice delegation and a good representation of South Dakota pharmacists.

It was an outstanding convention, due to the fine merchandising displays and booths featuring all phases of the drug industry. Also, the speakers were the best in the nation, as could be seen by the great numbers attending each session. The speakers whose addresses concerned the prescription department and also those special meetings I attended, all advocated the use of the N.A.R.D. schedule for prescription pricing.

This pricing schedule may be obtained by sending \$1.00 to the Secretary's Office, John Dargavel, 205 West Wacker Drive, Chicago, Illinois. The schedule is prepared to give a fair profit to the prescription department on both compounded and dispensed drugs.

George Lehr



THE COST OF CARELESSNESS

Accidents and sickness don't "just happen." They are caused — often by factors that the individual can control. One major cause is that many people are careless about their safety and their health.

The fact that almost 100,000 Americans die each year in accidents is one result of the public's failure to take better care of themselves. Accidents are the fourth leading cause of death in this country, and the leading killer of children and young adults. The over-all cost of accidents (including medical services, wages lost, and property damage) last year came to \$11,200,000,000 — almost enough to pay for all private medical, hospital, dental, and related services used during the same period.

Even so, there is an encouraging side to the story. In the last 50 years, although the annual number of deaths has gone up slightly, the accident death rate has declined by over 40 per cent — from 99.5 per 100,000 in 1906 to 56.5 in 1956. A number of factors have helped bring about this improvement. Advances in medical science — new drugs and surgical techniques, wider knowledge and use of blood and its derivatives — have played their part in reducing the accident death toll as well as in fighting disease.

Another factor in the prevention of accidents is the use of public pressure to enforce safety requirements. In areas where public control is possible (as in airline and railroad travel), improvements in safety records can be spectacular. The work of the National Safety Council and state and local groups has been especially important in stimulating public interest in safety measures.

Far less progress, however, has been made in areas where individual responsibility is great — in the home and in automobiles, for example. Too many people ignore the rules of safety, just as they often ignore opportunities provided by modern medical care. Clearly, accident tolls and costs could be reduced — as could incidence of illness and premature death — if the public gave greater attention to preventive health measures, better health habits, and early consultation with physicians.

Our accident record, particularly over the national holiday weekends, proves that doctors, hospitals, and safety engineers can do just so much. It is still the individual who carries the main responsibility for his own safety and health. — GEORGE BUGBEE, President, Health Information Foundation.

PHARMACY AND PHARMACISTS OR DRUGSTORE AND DRUGGIST

At its last convention held in New York April 29-30 the National Association of Boards of Pharmacy passed the following resolution:

"Be it resolved that the National Association of Boards of Pharmacy, in the interest of raising the professional status of pharmacy, hereby recommends that the words 'drugstore' and 'druggist' be supplanted by 'pharmacy' and 'pharmacist' in our usage, our communications and our laws throughout the country."

No pharmacy act, as far as we know, fails to refer to individuals licensed to practice

(Continued on Page 507)



RECENT PHARMACEUTICAL *Specialties*

CARDRASE

Description: Cardrase is an orally active, non-mercurial diuretic. Each tablet contains 125 mg. of ethoxzolamide (6-ethoxybenzothiazole-2-sulfonamide).

Indications: Cardrase is a synthetic carbonic anhydrase inhibitor. It is useful in mild to moderate congestive heart failure to bring about diuresis and thus reduce edema. In glaucoma, Cardrase is an adjunct to other therapeutic measures. It appears that an additive effect is obtained when Cardrase is used with miotics, and such combined therapy is therefor recommended. In addition, carbonic anhydrase inhibitors are being employed in epilepsy and in certain edematous states due to causes other than heart failure, such as premenstrual edema and the edema of pregnancy. Other conditions being treated with these agents include those characterized by hyperpotassemia and states in which the production of an alkaline urine is desirable.

Dosage: In congestive heart failure a single dose of 62.5 to 125 mg. (in resistant cases 250 mg. per day may be required) is given in the morning after breakfast for three consecutive days of each week, or the dose may be given on alternate days. In glaucoma the recommended dose is 62.5 to 250 mg. repeated two to four times daily depending on the individual response in intra-ocular tension.

Dosage Form: Tablets in bottles of 25, 100, 1000 and 5000.

Source: The Upjohn Company.

DARBID TABLETS

Description: Each tablet contains 5 mg. of isopropamide iodide which is (3-carbamoyl-3, 3-diphenylpropyl) diisopropylmethyl ammoniumiodide.

Indications: Darbid is a potent, long-acting

anticholinergic and is indicated in the treatment of a wide range of gastrointestinal disturbances, including: peptic ulcer, hyperchlorhydria, pyloroduodenal irritability, pylorospasm, neurogenic or spastic colon, hyperperistalsis, genitourinary spasm, functional diarrhea, acute nonspecific gastroenteritis, regional enteritis and ulcerative colitis.

Dosage: The usual dose is one 5 mg. tablet b.i.d. Some patients with severe symptoms may require two tablets every twelve hours. The usual adjuvant measures—diet, antacids, sedatives, rest and psychotherapy are recommended to assure maximum benefits.

Dosage Form: Bottles of 50.

Source: Smith, Kline and French.

COMBID SPANSULE

Description: A combination of 5 mg. of Darbid (anti-cholinergic) and 10 mg. of Compazine (tranquilizer-antiemetic) in sustained release form.

Indications: A specific formulation for those patients in whom emotional stress or nausea is associated with ulcer and other gastrointestinal disturbances.

Dosage: One capsule every 12 hours. Some patients may only require one capsule every 24 hours on arising. Only in the exceptional patient will it be necessary to increase the dosage to 2 capsule b.i.d. for optimum therapeutic response.

Dosage Form: Bottles of 30 capsules.

Source: Smith, Kline and French.

WIGRAINE SUPPOSITORIES

Description: Each suppository contains 1.0 mg. of ergotamine tartrate, 100 mg. of caffeine, 0.1 mg. of levorotatory belladonna alkaloids (87.5% hyoscyamine and 12.5% atropine as sulfates), and 130.0 mg. acetophenetidin in a specially blended bland

base of hydrogenated vegetable oils.

Indications: Wigraine Rectal Suppositories provide an effective means of treating the entire migraine-vascular headache syndrome — head pain, nausea and vomiting, and residual occipital muscle pain. Vasoconstriction of the dilated cerebral arteries is effected by ergotamine tartrate and caffeine, which act synergistically to reduce head pain. The levorotatory belladonna alkaloids rapidly return the gastrointestinal tract to its normal tone, thus affording relief of nausea and vomiting. The residual pain caused by sustained contractions of the skeletal musculature of the head and neck is promptly alleviated by acetophenetidin.

Dosage: Especially useful for the patient with severe nausea and vomiting, one suppository should be taken at the first indication of the migraine attack, followed by one suppository every 20-30 minutes until the attack is fully controlled. No more than six suppositories should be taken per attack and no more than twelve should be taken over a period of one week.

Dosage Form: Box of 12 suppositories.

Source: Organon, Inc.

NEBS

Description: Each nebs tablet contains 5 gr. acetyl-p-aminophenol (APAP) as the active ingredient.

Indications: Nebs take effect rapidly since APAP is the pain-relieving end-product which results when acetanilid and phenacetin are broken down by body chemistry. Nebs help relieve minor discomforts of tension headaches, neuralgia, common cold, muscular aches and pains, dysmenorrhea, bursitis, lumbago, sciatica, arthritis and rheumatism. Action is prolonged.

Dosage: Nebs may be taken as are any other pain relievers. Limit is 3 doses in any 24-hour period.

Dosage Form: 30 tablets to a bottle.

Source: The Norwich Pharmacal Co.

PEPULCIN

Description: Each Pepulcin tablet contains scopolamine methyl nitrate, 2 mg.; aluminum hydroxide, 2.5 gr.; magnesium hydroxide, .8 gr.; and ascorbic acid, 10 mg.

Indications: Pepulcin is indicated for the relief and management of peptic ulcer and gastric disorders characterized by hyperacidity and hypermotility.

The drug aids healing, protects against bleeding, gives prolonged antisecretory and antacid effect, inhibits vagal stimulation, and counteracts constipation.

Dosage: One tablet three times daily with meals and one before retiring.

Dosage Form: Tablets, bottles of 100.

Source: Ives-Cameron Company.

MEDROL TABLETS

Description: Each tablet contains 6-methyl-delta-1-hydrocortisone, 4 mg.

Indications: Medrol is a new derivative of prednisolone, effective in lower dosage with less edema, less gastric irritation, less psychic stimulation and greater inflammatory activity than other corticosteroids. Indicated for rheumatoid arthritis, bronchial asthma, nephrosis, dermatological conditions, hypersensitivity reactions and suppression of ophthalmic inflammatory conditions.

Dosage: Suppressive dose is usually 16 to 20 mg. daily for 3 to 7 days. The daily dose should then be reduced by 2 mg. decrements at 7-day intervals to maintenance levels. Maintenance dose is 2 to 10 mg. daily. The total daily dose, suppressive and maintenance should be taken in divided doses after meals and at bedtime with a light snack.

Contraindications are active tuberculosis, peptic ulcer, acute psychosis, Cushing's disease, nephritis, severe diabetes, tendency to thromboembolic episodes.

Dosage Form: White, scored 4 mg. tablets in bottles of 30.

Source: The Upjohn Company.

NEO-DELTEF DROPS 0.2%

Description: Each cc. contains Prednisolone (delta-1-hydrocortisone) 2.0 mg. and Neomycin sulfate 5.0 mg. (equivalent to 3.5 mg. Neomycin base).

Indications: In the following ocular conditions: Marginal ulceration, phlyctenular keratoconjunctivitis, nonspecific superficial keratitis, herpes zoster ophthalmicus, acne rosacea keratitis, allergic conjunctivitis, deep keratitis, sclerokeratitis, episcleritis, postoperative keratitis, and postoperative and post-traumatic uveitis.

Dosage: 1 to 2 drops every hour. When improved, 1 drop, 3 to 4 times daily.

Contraindications are tuberculosis infection of the eye and herpes simplex keratitis (dendritic keratitis).

Source: The Upjohn Company.

PANALBA CAPSULES

Description: Each capsule contains panmycin phosphate complex equivalent to tetracycline hydrochloride 250 mg. and Albamycin (as novobiocin sodium) 125 mg.

Indications: In the treatment of mixed infections and infections susceptible to therapy with tetracycline, novobiocin, or a combination of the two. This combination offers a wider range of therapeutic activity than with either antibiotic alone. Enhances antibacterial impact in the area of relative weakness of tetracycline drugs, activity against the resistance-prone staphylococci.

Dosage: For adults, 1 or 2 capsules three or four times daily, depending on the type and severity of the infection.

Dosage Form: Blue and brown capsules in bottles of 16.

Source: The Upjohn Company.

CATHOZOLE

Description: Cathozole tablets contain 125 mg. of the antibiotic novobiocin as sodium novobiocin (marketed by MSD as Cathomycin) and 375 mg. of sulfamethylthiadiazole.

Indications: Cathozole is indicated for the treatment of urinary tract infections, acute or chronic, uncomplicated or resistant, including cardiac patients or patients with renal impairment. Urinary tract infections responsive to Cathozole include cystitis, uerthritis, pyelonephritis, prostatitis, pyelitis (including pyelitis of pregnancy) and infections associated with trauma, foreign bodies or instrumentation.

Dosage: The usual dose of Cathozole tablets is two tablets three or four times a day.

Dosage Form: Bottles of 24 and 100.

Source: Merck, Sharp and Dohme.

CLYSMATHANE DISPOSABLE RECTAL UNIT

Description: Clysmathane (Fleet) is a 37 ml. solution containing 0.625 Gm. theophylline monoethanolamine (Theamin, Fleet) in a disposable, plastic squeeze bottle, especially designed for rectal administration. Monoethanolamine, an amino-derivative of ethyl alcohol, has no pharmacologic action in combination with theophylline, but serves simply as an effective solubilizing agent. Attached to the bottle is an anatomically correct rectal tube, pre-lubricated and pro-

(Continued on Page 507)

**EVERY WOMAN
WHO SUFFERS
IN THE
MENOPAUSE
DESERVES**

"PREMARIN"

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PHARMACY AND PHARMACISTS OR DRUGSTORE AND DRUGGIST—

(Continued from Page 503)

pharmacy, by the term "pharmacist." Nor do we know of any pharmacy act which does not refer to the place where pharmacy is practiced as a "pharmacy." Other terms such as "drugstore" and "druggist" may be used in definitions, or as additional terms in various state pharmacy laws, but the terms "registered pharmacist" and "registered pharmacy" are the customary designations in our pharmacy laws and regulations thereunder.

The abbreviation "R.Ph." is derived from the term "registered pharmacist" which is practically without exception the legal designation of the individual who is licensed by law to practice pharmacy under the respective state pharmacy acts.

The importance of complying with the intent of the resolution passed by the NABP lies in the fact that drugs, medicines, and poisons are being sold to a continuously increasing extent in establishments which are not licensed pharmacies, by persons who are not registered pharmacists.

From its very beginnings, the American Pharmaceutical Association has stressed the importance of conveying to the public the difference between the sale of drugs as merchandise and the dispensing of drugs as a professional service.

The terms "drugstore" and "druggist" have the connotation of business whereas the terms "pharmacy" and "pharmacist" definitely imply professionalism.

It seems to us that giving attention to and following out the purpose of the NABP resolution should have the unqualified support of every pharmacist. (An editorial by Robert P. Fischelis in the September issue of the Practical Pharmacy Edition of the Journal of the American Pharmaceutical Association).

PHARMACY RESPONSIBILITY FOR SELF GOVERNMENT—

(Continued from Page 501)

emphasize the professional services you render.

13. Be certain you and your personnel present a proper appearance. Clean jackets for your pharmacists help considerably in an effective P.R. program.

14. Take advantage of all of the general public relations programs beamed to the public in your behalf.

15. Supervise and render a professional service in the sale of packaged medicines.

16. Make certain your customers understand directions on prescriptions.

17. Take an active part in civic affairs in your community. You can find a little time if you really try.

18. You already belong to your state association but join those on the local and national levels, if you are not already a member. They are all working for you and need your support.

19. Let the public know the professional services only you can render because of your training and experience.

20. Give your board of pharmacy the necessary laws and your cooperation as I know you will do in eliminating those pharmacies which are not operated in the best interests of the public health. As long as there are dirty, unprofessional pharmacies, operated by pharmacists who do not abide by either moral principles or the law, there will be poor public relations existing in the areas where these pharmacies are operated. Of course, I am assuming that you will also cooperate fully with your association officers in helping to achieve this progress.

You have a job to do and the sooner you do your part, the sooner we will obtain the respect and recognition as a profession which we are seeking from the public we serve.

RECENT PHARMACEUTICAL SPECIALITIES—

(Continued from Page —)

tected by a readily removable cover. It may be quickly and safely self-administered by the average patient.

Indications: Clysmathane (Fleet) alleviates symptoms encountered in bronchial asthma and the acute episodes associated with heart failure by supplying prompt and therapeutically adequate blood levels of theophylline. Instillation of a solution of theophylline assures uniform absorption. Action is speedy because there is no "melting period," as with suppositories. Repeated dosage does not cause irritation of the rectal mucosa, and there is no laxative effect. side effects are virtually eliminated.

Dosage: One Clysmathane (Fleet) unit administered as a retention enema before retiring or as the physician may direct.

Source: C. B. Fleet Co., Inc.

PHARMACY *News*

HONOR SOCIETY INITIATES TWO PHARMACY STUDENTS

Two South Dakota State College Pharmacy Students were initiated into Phi Kappa Phi, national honorary scholastic society, during ceremonies before a banquet Thursday, November 14.

The initiation took place in the faculty lounge of the Union. The banquet in new Union Ballroom followed.

Harold S. Bailey, associate professor of pharmacy, spoke at the dinner. Dr. Bailey's topic was "Education for Professional Responsibility."

To be chosen for membership, a student must have a grade point average of at least 3.25 (4.0 is all A's, and 3.0 is all B's). He also must have good character, be within a year of graduation and have been at State College for one year. Not more than six per cent of the senior class may be elected to membership in the organization.

Election to the society is one of the highest honors that can be given at State College and compares with Phi Beta Kappa selection in liberal arts colleges.

Students named to the society were Merle E. Amundson, Colton and Rodney W. Honner, Geddes.

HOSPITAL FORMULARY SYSTEM DISCUSSED

Special Committees representing the American Society of Hospital Pharmacists and the National Pharmaceutical Council met in Atlantic City, N. J. recently. With Robert A. Hardt, President of the National Pharmaceutical Council, and Leo F. Godley, President of the American Society of Hospital Pharmacists serving as Moderators, representatives from each group presented a series of papers followed by open discussions. The principal purpose of the meeting was to discuss the organization and operation of the formulary system as related to the distribution of drugs in hospitals.

In reviewing the place of the formulary system in the hospital organization, representatives of the NPC pre-

sented the following subjects: The Effect of the Formulary System on Industry, The Effect of the Formulary System on Research Advances, The Effect of the Formulary System on Physicians' Prerogatives, and The Effect of the Formulary System on the Over-All Profession of Pharmacy. Hospital Pharmacists representing the ASHP spoke on the following: Definition of a Formulary, The Need for a Formulary, Operation of the Formulary, and The Effect of the Formulary System on Hospital Pharmacy.

PHARMASCOOPS

Dale and Carol Youells, SDSC 1951 and 1950, recently announced the birth of a baby girl, Kristen Kay. Dale is chief pharmacist for a general hospital at Atlantic City, New Jersey.

Robert Monroe, SDSC 1957, visited the division of pharmacy while on his way to a new assignment as pharmacist at the public health service hospital in Rapid City.

COMMISSION ON HEALTH CAREERS FORMED

Formation of a national Commission on Health Careers to plan ways to meet the acute need for qualified health personnel in the United States was announced recently by Basil O'Connor, President of the National Health Council.

The Commission will be headed by Dr. Leonard A. Scheele, former Surgeon-General of the United States Public Health Service and now President of Warner-Chilcott Laboratories in New Jersey. Its membership has been drawn from leaders in American life.

Mr. O'Connor said the Commission had been created in a setting which finds health manpower shortages already at a "crisis stage."

"Lack of manpower poses the biggest threat not only to our present health services, but to the future progress of medical science," he declared.

"Many people, when they think of the health professions, naturally picture the physician, the dentist, and the nurse," he said. Actually the range is infinitely broader. Workers in more than 150 health occupations guard the well-being of American citizens. Many of these professions are interlinked and mutually dependent. The great majority are dangerously understaffed."

Mr. O'Connor said the

Commission would undertake a "total approach" in meeting health manpower needs.

He outlined the general task of the Commission as:

1. Sparking and giving added impetus to all kinds of health career programs at local, regional, and national levels.
2. Investigating the possibilities of careers in the health field, not only for young people, but for other potential health workers.
3. Assembling information vital to the full staffing of the health services by conducting fact-finding studies on health manpower problems and by encouraging and offering guidance in the conduct of such studies by other groups.
4. Focusing on such specific issues as educational facilities and programs for potential health workers, the availability of scholarships and loan funds, aptitude testing, salary ranges in the health field, etc.
5. Encouraging further studies of the work done by highly trained people and ways of utilizing their skills most effectively.
6. Stimulating public recognition of the need for adequate staffing of health services.

Mr. O'Connor said that a pioneering step toward the adequate staffing of the health services of the country was taken three years ago when the National Health Council initiated its Health Career Horizons Project.

"This project is designed to inform the nation's young people of the wide range of career opportunities in the health field. With the cooperation of national, state and local organizations, and with materials supplied by The Equitable Life Assurance Society, the Project has achieved a remarkable degree of success," he said.

He said that the Commission would carry on the full operations of the Health Careers Horizons Project, while at the same time engaging in its greatly broadened task.

In accepting the Chairmanship of the Commission, Dr. Scheele said that virtually every element in American society had a stake in the Commission's efforts and pointed out that labor, industry, and education are all involved.

The National Health Council, 1790 Broadway, New York City, is an association of 61 national organizations concerned with health. Its membership consists of voluntary and governmental health agencies, civic and professional associations, and business firms having a major interest in health.

RECENT PHARMACEUTICAL SPECIALTIES INDEX Volume X, 1957

Index By Product

	Page	Issue		Page	Issue
Adrestat (Organon)	423	Oct.	Hydeltrasol and Neo-Hydeltrasol (Merck, Sharp and Dohme)	379	Sept.
Alba-Penicillin Capsules (Upjohn)	32	Jan.	Ketonil (Merck, Sharp and Dohme)	148	April
Albamycin Syrup (Upjohn)	32	Jan.	Lenic Capsules (Lilly)	465	Nov.
Albumisol (Merck, Sharp and Dohme)	336	Aug.	Leukeran (Burroughs-Wellcome)	149	April
Antepar Wafers (Burroughs-Wellcome)	32	Jan.	Liquid Trisogel (Lilly)	433	Oct.
Campazine Tablets (Smith, Kline and French)	33	Jan.	Marsilid (Hoffmann-LaRoche)	283	July
Cardrase (Upjohn)		Dec.	Maxukal (Breon)	282	July
Cathomycin Syrup (Merck, Sharp and Dohme)	336	Aug.	Medrol Tablets (Upjohn)		Dec.
Cathozole (Merck, Sharp and Dohme)		Dec.	Meproline (Merck, Sharp and Dohme)	148	April
Celontin (Parke-Davis)	201	May	Merck Using A-B-X Labeling (Merck)	149	April
Clysmathane Disposable Rectal Unit (Fleet)		Dec.	Metretan Ophthalmic Suspension (Schering)	201	May
Combid Spansule (Smith, Kline and French)		Dec.	Nebs (Norwich)		Dec.
Compazine Spansule Capsules (Smith, Kline and French)	435	Oct.	Neocurtasal (Winthrop)	282	July
Cordex-Forte (Buffered) (Upjohn)	32	Jan.	Neo-Deltec Drops 0.2% (Upjohn)		Dec.
Darbid Tablets (Smith, Kline and French)	466	Dec.	Neo-Hydeltrasol Ophthalmic Solution (Merck, Sharp and Dohme)	71	Feb.
Darvon (Lilly)		Nov.	Noscapine (Merck)	103	March
Doxegest (Breon)	202	May	Nugestoral (Organon)	149	April
Eardrops Tron-Oto (Abbott)	378	Sept.	Nugestoral (Organon)	284	July
Enovid Tablets (Searle)	433	Oct.	Oil Retention Enema (Fleet)	435	Oct.
Entefur (Eaton)	149	April	Orinase (Upjohn)	337	Aug.
Enzeon (Breon)	103	March	Pacatal (Warner-Chilcott)	103	March
Ethotoin (Abbott)	337	Aug.	Panalba Capsules (Upjohn)		Dec.
Fleet Enema Disposable Unit (Fleet)	378	Sept.	Paracortol Tablets (Parke-Davis)	377	Sept.
Floropryl Ophthalmic Ointment (Merck, Sharp and Dohme)	336	Aug.	Pen-Vee-Cidin (Wyeth)	103	March
Furacin Water Mix Veterinary (Eaton)	377	Sept.	Pepulcin (Ives-Cameron)		Dec.
Furadantin Intravenous Solution (Eaton)	377	Sept.	Peritrate Sustained Action (Warner-Chilcott)	201	May
Furadantin Oral Suspension (Eaton)	377	Sept.	Phosphatabs (Warner-Chilcott)	433	Oct.
Furestrol Suppositories (Eaton)	465	Nov.	Plaquenil Sulfate (Winthrop)	33	Jan.
Gantrimycin (Hoffmann-LaRoche)	71	Feb.	Polymagma (Wyeth)	465	Nov.
Harmonyl (Abbott)	336	Aug.	Romilar CF (Hoffman-LaRoche)	434	Oct.
Hydeltra T. B. A. Suspension (Merck, Sharp and Dohme)	71	Feb.	Saff (Abbott)	378	Sept.

(Continued on Page 514)

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Knutson, Al	
President's Page	
(Pharmacy)	
34, 73, 108, 150, 203, 235	

L

Lampert, A. A., M.D.	
Report of Actions of the	
House of Delegates	16
AMA Delegate's Report	255
Lange, Winthrop, Ph.D.	
Synthetic Suspending	
Agents	100
Laryngeal and Tracheal	
Emergencies in the	
Newborn and Young Infant	
Alden H. Miller, M.D.	44
Lehr, George	
President's Page	
(Pharmacy)	
338, 375, 429, 460, 502	
Leigh, F. D., M.D.	
Pentothal Anesthesia	
In Obstetrics	243

M

McGreevy, John V., M.D.	
Subcutaneous Emphysema	
Following Tonsillectomy	160
McGreevy, Edmond J., M.D.	
Subcutaneous Emphysema	
Following Tonsillectomy	160
McKenna Hospital Staff	
Meeting	407
Medical Bookshelf	20, 61, 91,
126, 176, 218, 260, 362, 412,	
450, 484	
Medical School Affairs	
Committee Minutes	58
Merchandising and	
Advertising the Animal	
Health Dept.	
R. D. Watson	328
Meredith, Donald T.	
You and Your Public	277
Meetings of House of	
Delegates	298
Miller, Alden H., M.D.	
Laryngeal and Tracheal	
Emergencies in the	
Newborn and Young	
Infant	44
Miller, G. A., M.D.	
1871-1957	443
Minutes of the Council	
Meeting	55, 297, 444
Morrissey, M. M., M.D.	
(President's Page Medical)	
219, 261, 289, 348, 446, 478	
Murray, D. H., M.D.	
The Dakotas, AMA and	
the Public	350
Myers, J. A., M.D.	
Tuberculosis and the	
Physician in General	
Practice	391

O

Officers and Councillors	
—SDSMA	294

P

Pahlas, C. J.	
The History of the	
S.D.S.M.A. 1882-1956	
9, 50, 87, 123, 171, 212, 274, 353	
Palmer, Walter L., M.D.	
The Management of	
Peptic Ulcer	83

Paulson, Gordon S., M.D.	
Gastrointestinal	
Dysfunction due to	
Diabetic Neuropathy	113
Peeke, A. P., M.D.	
President's Page (Medical)	
23, 59, 95, 129, 180	
Pentothal Anesthesia in	
Obstetrics	
F. D. Leigh, M.D.	243
Pfister, Faris F.	341
Pharmacy and the Food and	
Drug Administration	
M. P. Kerr	456
Pharmacy Enrollment Data	146
Pharmacy News	36, 76, 151,
204, 240, 285, 340, 380, 468, 508	
Pharmacy's Responsibility	
for Self Government	
W. E. Powers	497
Pirtle, E. C., Ph.D.	
Viruses as Infesting	
Agents	4
Powers, W. E.	
Pharmacy's Responsibility	
for Self Government	497
Present Status of	
Chemotherapy In	
Tuberculosis	
American College of	
Physicians	442
Problems of Small General	
Hospitals in S. D.,	
A Survey	
Helga Schultz, B.S., R.N.	371
President's Page (Medical)	
A. P. Peeke, M.D.	
23, 59, 95, 129, 180	
M. M. Morrissey, M.D.	
219, 261, 289, 358, 446, 478	
President's Page (Pharmacy)	
Al Knuston	
34, 73, 108, 150, 203, 235	
George Lehr	
338, 375, 429, 460, 502	
Presidential Address—	
North Central Conference	
P. H. Woutat, M.D.	48
Price, Lawrence W., D.V.M.	
Veterinary Medicine and	
the Pharmacy	30, 66
Problems of Progress in	
Pharmacy	
J. H. Goodness, Ph.G.	272

Q

Quistgard, John E.	
Your Responsibility As	
Director and Preceptor	
of Beginner Personnel	231

R

Ranney, T. P., M.D.	
1881-1957	390
Reagan, P. C., M.D.	
Traumatic Axillary	
Aneurysm; Surgical	
Treatment and Six Year	
Follow Up Case Report	472
Recent Pharmaceutical	
Specialties	32, 71, 103, 148,
201, 282, 336, 377, 433, 465, 510	
Recovery of Severe	
Congenital Atelectasis	
C. L. Swanson, M.D.	245
Reports of Officers and	
Councillors as Adapted by	
the House of Delegates	311

Report of S. D. SAMA	
Delegate	
R. M. Cribbs	259
Report on Actions of the	
House of Delegates—AMA	
Delegate	
A. A. Lampert, M.D.	16
Results of Questionnaire on	
Physicians Liability	410
Retroperitoneal Rupture of	
the Duodenum Due to	
Nonpenetrating Abdominal	
Trauma	
J. J. Stransky, M.D.	77
Rodine, J. C., M.D.	
Splenic Rupture	
(Case Report)	6
Roster by Alphabet	
1957-1958	325
Roster by Districts	
1957-1958	322

S

Schultz, Helga, B.S., R.N.	
Problems of Small General	
Hospitals in S. D.	
A Survey	371
Schwartz, Milford L.	
1916-1957	368
Shirley, J. C., R.P.	
S. D. Pharmacy and	
Animal Health	427
South Dakota Joint Com-	
mission for the Improve-	
ment of the Care of the	
Patient	403
South Dakota Pharmacy	
and Animal Health	427
Splenic Rupture	
(case report)	
J. C. Rodine, M.D.	6
Stanage, W. F., M.D.	
Hereditary Spherocytosis	81
Stransky, John J., M.D.	
Retroperitoneal Rupture	
of the Duodenum Due to	
Nonpenetrating	
Abdominal Trauma	77
Subcutaneous Emphysema	
Following Tonsillectomy	
Edmond J. McGreevy, M.D.	
and John V. McGreevy,	
M.D.	160
Sullivan, Father	
Guest Editor	482
Surface Active Agents	
N. E. Webb, Ph.D.	330
Swanson, C. L., M.D.	
Recovery of Severe	
Congenital Atelectasis	245
Synthetic Suspending Agents	
Winthrop Lange, Ph.D.	100

T

Teaspoon Versus the	
Fluidram	
S. J. Greco, Ph.D.	144
Test Your Tax I.Q.	479
The Dakotas, AMA and	
the Public	
D. H. Murray, M.D.	350
The Doctor as a Witness	
G. A. Bangs	397
The Doctor's Duty in	
Law Enforcement	
Honorable Judge James R.	
Bandy	162

- The History of the S. D. State Medical Association 1882-1956
C. J. Pahlas
9, 50, 87, 123, 171, 212, 247, 353
- The Management of the Infertile Couple
N. W. Fugo, M.D.474
- The Management of Peptic Ulcer
Walter L. Palmer, M.D.83
- The Obstructed Tear Duct
Sidney Becker, M.D., and John B. Gregg, M.D.342
- The Prescription, the Pharmacist, The Veterinarian
Wm. A. Knapp, Jr., D.V.M. 228
- The Redfield State Hospital and School
Mr. A. A. Thompson251
- The Restrictive Drug Sales Problem
Bliss C. Wilson190
- The South Dakota Prescription Survey, 1956
Harold S. Bailey, Ph.D.420
- The Trained Office Girl216
- The Uses and Abuses of Intramedullary Nails
Einer W. Johnson, Jr., M.D.207
- This Is Your Medical Association26, 63, 96, 133, 181, 223, 265, 292, 365, 415, 452, 488
- The Month In Washington
221, 262, 360, 409, 449, 483
- Thompson, A. A.
The Redfield State Hospital and School251
- Thompson, Robert F., M.D.
Eosinophilic Leukemoid Reaction Due to Drug Sensitivity (Case Report)39
- Transactions of the S.D.S.M.A. 76th Annual Session294
- Traumatic Axillary Aneurysm; Surgical Treatment and Six Year Follow Up Case Report
P. R. Reagan, M.D. and R. E. Van Demark, M.D.472
- Treatment of Severe Thoracic Injuries
Philip E. Bernatz, M.D.119
- Trom, O. S., M.D.
What Would Best Improve Inter-Professional Relations with Medical Men137
- Tuberculosis and the Physician in General Practice
J. A. Myers, M.D.391
- U**
- Upper Gastrointestinal Complications of Neurological Disease
John B. Gregg, M.D.153
- V**
- Van Demark, Robert E., M.D.
Burned Hands in Infants1
Acute Gout In Pheasant Hunters349
- Traumatic Axillary Aneurysm; Surgical Treatment and Six Year Follow-up Case Report472
- Vergin, Virgil A.
Ideas for Simplifying the Prescription Work of the Pharmacist195
- Veterinary Medicine and the Pharmacist
Lawrence W. Price, D.V.M.30, 66
- Viruses as Infecting Agents
Eugene C. Pirtle, Ph.D.4
- W**
- Watson, R. D.
Merchandising and Advertising the Animal Health Dept.328
- Webb, N. E., Ph.D.
Surface Active Agents330
- Western Leadership
J. B. Heins, Ph.G., Ph.M.369
- What Would Best Improve Inter-Professional Relations with Medical Men
O. S. Trom137
- Wilson, Bliss C.
The Restrictive Drug Sales Problem190
- Woutat, P. H., M.D.
Presidential Address—North Central Conference48
- Y**
- Your and Your Public
Mr. Donald T. Meredith277
- Your Responsibility as Director and Preceptor of Beginner Personnel
John E. Quistgard231

(Continued from Page 510)

- Selsunef Ointment 72 Feb.
(Abbott)
- Sparine in Veterinary Medicine 283 July
(Wyeth)
- Suavitil 201 May
(Merck, Sharp and Dohme)
- Sul-Spansion 33 Jan.
(Smith, Kline and French)
- Sumycin 337 Aug.
(Squibb)
- Synkayvite 436 Oct.
(Roche)
- T. H. and M. Cough Syrup 32 Jan.
(Upjohn)
- Tedral Pediatric Suspension 201 May
(Warner-Chilcott)
- Tempogen Tablets 71 Feb.
(Merck, Sharp and Dohme)
- Tetrex APC With Bristamin 467 Nov.
(Bristol)
- Tetrex Pediatric Capsules 467 Nov.
(Bristol)
- Thorazine Spansule 466 Nov.
(Smith, Kline and French)
- Tral 284 July
(Abbott)
- Tricofuron 377 Sept.
(Eaton)
- Trionine 282 July
(Hoffman-LaRoche)
- Trionine 337 Aug.
(Roche)
- Ultran 148 April
(Lilly)
- V-Cillin K 466 Nov.
(Lilly)
- V-Cillin Sulfa Pediatric 33 Jan.
(Lilly)
- Vi-Penta Drops 103 March
(Hoffmann-LaRoche)
- Wigraine Suppositories Dec.
(Organon)
- Zanchol 284 July
(Searle)

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DECEMBER ★ 1957

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CHLOROMYCETIN is a potent therapeutic agent and, because certain blood dyscrasias have been associated with its administration, it should not be used indiscriminately or for minor infections. Furthermore, as with certain other drugs, adequate blood studies should be made when the patient requires prolonged or intermittent therapy.

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